

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TENNESSEE AT MEMPHIS**

**SHELBY ADVOCATES FOR VALID
ELECTIONS; MICHAEL KERNELL;
JOE TOWNS, JR.,
ANN SCOTT, BRITNEY THORNTON**

Plaintiffs

JURY TRIAL DEMAND

No. 2:18-cv-02706

**TRE HARGETT in his Official capacity
as TENNESSEE SECRETARY
OF STATE; MARK GOINS, in his Official capacity
As the COORDINATOR OF ELECTIONS for the STATE
OF TENNESSEE; THE TENNESSEE ELECTION COMMISSION;
KENT D. YOUNCE, JUDY BLACKBURN,
GREG DUCKETT, DONNA BARRETT, JAMES H. WALLACE,, JR.,
TOM WHEELER, MIKE MCDONALD, in each of their Official Capacity
As a Member of the TENNESSEE ELECTION COMMISSION;
LINDA PHILLIPS, in Her Official Capacity as a Administrator of the
SHELBY COUNTY ELECTION COMMISSION; SHELBY
COUNTY ELECTION COMMISSION and
ROBERT MEYERS, NORMA LESTER, DEE NOLLNER, STEVE STAMSON,
ANTHONY TATE, in each of their Official Capacity as a Board of Commissioner of the
SHELBY COUNTY ELECTION COMMISSION.**

Defendants.

**VERIFIED AMENDED COMPLAINT FOR DEPRIVATION OF CONSTITUTIONAL
RIGHTS, INJUNCTIVE RELIEF AND DECLARATORY RELIEF**

Plaintiffs Shelby Advocates for Valid Elections (hereinafter "SAVE"), Michael Kernell,

Joe Towns, Britney Thornton, and Ann Scott (hereinafter collectively the “Individual Plaintiffs”), for their Verified Amended Complaint for Declaratory and Injunction Relief herein allege as follows:

I. INTRODUCTION

1. The right to vote freely for the candidate of one’s choice is of the essence of a democratic society, and any restrictions on that right strikes at the very heart of representative government. *Reynolds v. Sims*, 377 U.S. 533, 556 (1964).

2. The right to vote is protected in more than the initial allocation of the franchise. Equal protection applies as well to the manner of its exercise. Having once granted the right to vote on equal terms, the State may not, by later arbitrary and disparate treatment, value one person’s vote over that of another. *Bush v. Gore*, 531 U.S. 98, 104 (2000).

3. This is not an election contest. This is a civil rights action for declaratory and injunctive relief pursuant to 42 U.S.C. 1983, Rules 57 and 65 of the Federal Rules of Civil Procedure, and 28 U.S.C. 2201 and 2002, brought against Tennessee and Shelby County elections officials and agencies to enforce the fundamental right to vote and to uphold the equal dignity owed by the State of Tennessee to each voter and each vote. As set forth herein, the Defendants and their predecessors have, through a pattern of maladministration, wanton disregard of their duties under Tennessee and federal law, and the creation and maintenance of a non-functioning voting system, deprived members of Shelby Advocates for Valid Elections, and Individual Plaintiffs, who are citizens of Shelby County, Tennessee of their fundamental Constitutional right to vote and to equal protection of that right.

4. Further, the Defendants' actions and inactions in requiring the members of SAVE, and the Individual Plaintiffs to use outdated and technologically deficient digital electronic voting machines ("DREs") as the means to casting their ballot in Shelby County, Tennessee further violates their constitutional rights. Because Shelby County's 13 plus year old DRE touchscreen voting machines and voting systems are insecure, lack a voter-verified paper audit capacity, and fail to meet minimum statutory requirements for recertification and use, requiring the Plaintiff voters to use those machines and voting systems violates their constitutional rights to have their votes recorded in a fair, precise, verifiable, and anonymous manner, and to have their votes counted and reported in an accurate, auditable, legal, and transparent process.

5. The Defendants are continuing to promulgate and maintain a voting system in Shelby County, Tennessee that denies the meaningful and equal exercise of the right to vote by using non-uniform standards, processes, and rules, and that employs untrained or improperly trained personnel, and that has wholly inadequate systems, procedures, and funding necessary to ensure the meaningful and equal exercise of the right to vote. As a direct result, the Plaintiffs and others right to cast a meaningful ballot has been severely burdened and, in many cases denied altogether. Moreover, the severity of the burdens and likelihood of total disenfranchisement that a Shelby County, Tennessee voter faces also varies tremendously based upon where they live – i.e. in Shelby County, Tennessee as opposed to other counties in Tennessee—due to the maintenance of non-uniform rules, standards, and procedures in violation of equal protection. Shelby County, Tennessee's voting system promotes disorderly, confusing, and ultimately inequitable elections. The foreseeable result is a massive disenfranchisement and unreasonable dilution of the vote, as well as a loss of confidence in the voting system, which in turn, further disenfranchises by discouraging Shelby County residents from registering or voting.

6. The Defendant Tennessee Secretary of State Hargett, other Defendants (and their predecessors and successors) are responsible under state law for the administration and oversight of Shelby County, Tennessee's voting system, including ensuring that the system complies with the Constitutions and federal and state law both in design and execution. Yet, acting under color of state law, Defendants have promulgated and maintained Shelby County, Tennessee's constitutionally and statutorily infirm, defective, and inequitable voting system. Through the Defendants repeated administration of elections marked by substantial breakdowns and failures in protecting the right to vote, they have not acted reasonably or neutrally, have acted intentionally, arbitrarily and capriciously, have violated the constitutional rights of the Plaintiffs, and, absent remedial action by this Court, will continue to violate, rights secured to the Plaintiffs and other Shelby County citizens by the Fourteenth Amendment, and by other federal laws.

7. The failings of the Shelby County, Tennessee voting system are not new. They have been well-known to Defendants and their predecessors since at least 2012 as verified by Defendant Tennessee Secretary of State Tre Hargett in a letter to the State Comptroller. Exb "A". And, under the law, even unanticipated inequality is especially arbitrary so as to constitute a violation of equal protection.

8. Yet the deprivations continue and worsen. As recently as November 2018, as reported by Defendant Linda Phillips in a recent Shelby County Election Commission meeting, some six thousand of Shelby County, Tennessee qualified Shelby County voters were not located in the Shelby County Election Commission Electronic Poll Books due to a mismatch between their home addresses in the Electronic Poll Books and the United States Postal Service. As a result, thousands of voters who attempted to cast their vote during that election suffered a severe burden in having to jump through hoops to prove they were in fact a registered voter, with undoubtedly

many giving up and forgoing their precious right due to confusion, lack of time to fight the fundamentally unfair system, or pure discouragement. This was the most recent, undeniable evidence that the Shelby County, Tennessee voting system does not equally or adequately guarantee the fundamental right to vote to Shelby County citizens.

9. The violations of Constitutional and federal law within Shelby County's voting system are pervasive, severe, chronic, and persistent, and will continue absent the declaratory and injunctive relief sought here. The foreseeable, cumulative effects of the non-uniform, non-standard, and completely deficient voting standards, processes, and resources in Shelby County, Tennessee had disenfranchised or severely burdened the right to vote of thousands of Shelby County citizens. This massive disenfranchisement and severe burden on the right to vote over at least a decade in Shelby County, Tennessee is not due to singular or isolated failures, but to widespread, serious, and deeply-rooted failing at the most basic levels in Shelby County's voting system; non-uniform standards; inadequate funding, planning and training.

10. The widespread pattern of constitutional infractions in Shelby County, Tennessee which has deprived thousands of the right to vote and/or to vote for the candidate of their choice, demonstrates that Defendants are failing to discharge their duties under Tennessee and federal law, violating the constitutional rights of thousands of Shelby County, Tennessee citizens. For example, the *Stateline* publication focused on the Shelby County voting system in its article naming Tennessee as one of the hardest places to vote in America in November 7, 2018, and reporting the comments of Defendant Administrator Linda Phillips that "the realities of using a 15-year old computer system" with "a system of memory cards, thumb drives and 'very antiquated' technology" explained delayed reporting of results on election eve, Exb. "B". The article documents the two decades of continuing barriers to the right to vote in the County, with

voters being given the wrong ballots, people falsely told they had early voted and turned away, improper voter registration purges, and in the November 2018 election, electronic poll books at times losing connectivity and early voting poll workers incorrectly turning voters away instead of allowing a provisional ballot or advising them to wait until the connectivity issue was corrected. Exb. “B”. In addition, voters who needed larger type and pressed a button that enlarged text on the electronic voting machine were faced with a ballot then that bumped the Democratic gubernatorial candidate Karl Dean’s name off the first page and onto the middle of the second page, while Republican gubernatorial candidate Bill Lee still appeared on page one. Exb. “B”. Incredibly, the Defendants’ fix was to have poll workers hand out magnifying glasses to voters struggling to read the ballot. Exb. “B”.

11. While the Defendant Administrator Linda Phillips averred in the *Stateline* article that the county would use new voting machines in 2019, that provided an auditable paper trail, she once again back-pedaled only a month later now publicly stating new machines would not be purchased until 2020. Exb. “C”. Yet, the Defendants have acknowledged the need for new voting machines since 2013, with even a Request for Proposal in 2015 stating that the absence of vendor support for the critical and obsolescent software presents an unacceptable risk to the election delivery capability and operation of the election commission.

12. There also have been a plethora of lawsuits in 2018 against the Defendant Shelby County Elections Commission, a pattern which has continued over the past two decades and affected thousands of voters. As set forth in this Amended Complaint later in more detail, separate lawsuits are presently pending against the Defendant Shelby County Election Commission by the NAACP, the Tennessee Black Voter Project, and John Barzizza who was a candidate for

Germantown Mayor (a suburb in Shelby County, Tennessee). This again, shows a failed voting system that continues to erode the confidence of the voters.

13. The Plaintiffs are not seeking to recount the votes or challenge the results of any past elections. Instead, they are seeking to require Defendants to put in place a competent and fair voting system as required by the Constitution and federal voting rights laws to ensure that every Shelby County resident eligible to vote can do so on fair and equal terms and that each vote is fairly and equally counted. They seek preliminary and permanent injunctive relief for the Court to Order constitutional elections systems, processes, tabulators, and voting machines, equipment be implemented, adequate funding be allocated, training be conducted, and sufficient workers to be hired, that do the same.

II. PARTIES

A. PLAINTIFFS

1. Shelby Advocates for Valid Elections

14. Plaintiff SHELBY ADVOCATES FOR VALID ELECTIONS (“SAVE”) is a domestic non-profit corporation organized and existing under the laws of the State of Tennessee, with its principal office located at 111 S. Highland, #160, Memphis, TN 38111. SAVE brings this action on behalf of itself and on behalf of the voters of Memphis and Shelby County, Tennessee. The incorporators of SAVE are Carol J. Chumney, Michael L. Kernell, and Dr. Joseph Weinberg, and they are members. Each are qualified registered voters in Shelby County, Tennessee and could sue in their own right.

15. SAVE is a membership organization, with a membership that consists of individuals residing in Tennessee.

16. SAVE's purpose is for research, advocacy, and education to ensure the fundamental right to vote in public elections.

17. SAVE's purpose includes submitting open records requests to governmental bodies about elections; to report to the public and governmental bodies on vulnerabilities related to public elections; to monitor nationwide developments in election law and technology; to provide speakers for programs to inform and educate the public about voting vulnerabilities; to provide commentary from its leadership to the public through the media, press, and social media platforms; to collaborate with election computer scientists, academics, non-profits, and organizations to advocate for reforms in the public election voting processes; to facilitate through its members, volunteers, and others the monitoring of elections by poll watching, auditing of election results, observation, and education of the public at large, among other things.

18. As further set forth herein, the actions of the Defendants substantially impede SAVE's ability to further its goals and institutional purpose of advancing voters' full and meaningful participation in the electoral process by registering to vote, voting, and having their votes counted on a fair and equal basis, and because SAVE's resources are being diverted and drained by the need to address the voting inequities and irregularities that continue to occur throughout Shelby County, Tennessee. SAVE's members also have been specifically aggrieved by Defendants' actions, which have infringed on their fundamental right to vote and to equal protection. It is reasonably anticipated that these or other individual members of SAVE will be similarly aggrieved by Defendants' actions in the future absent injunctive relief. The aggrieved individual members of the SAVE have standing in their individual capacity, but neither the claims asserted nor the relief requested herein requires the participation of SAVE's individual members to vindicate their individual rights.

19. SAVE, acting on its own behalf, has organizational standing to bring each of the claims for prospective relief stated herein.

20. SAVE, acting on behalf of its members who are threatened with imminent injury-in-fact, including the Individual Plaintiffs identified herein, also has association standing to bring the claims for prospective relief stated herein.

2. Plaintiff Individuals

21. The individual plaintiffs described are Shelby County residents who were or will be severely burdened in attempting to exercise their right to vote, and/or efforts to be elected to public office, as a result of Defendants' maintaining non-uniform and wholly inadequate voting rules, systems, and procedures in Shelby County, Tennessee. The individual plaintiffs reasonably anticipate that, absent injunctive relief, they will be deprived or severely burdened in the exercise of the franchise in future elections. The prior and threatened future deprivations of Constitutional and statutory rights suffered by the individual plaintiffs flow from longstanding, systematic breakdowns in the Shelby County voting system. Systematic relief is required, including to ensure promulgation and implementation of adequate, uniform rules and procedures to protect the fundamental right to vote in Shelby County.

22. Plaintiff MICHAEL KERNELL (hereinafter "Plaintiff Kernell") is an incorporator, director and member of SAVE. Plaintiff Kernell is a former Tennessee State Representative (D-93); and also former non-partisan Shelby County School Board Commissioner (Dist. 9). Plaintiff Kernell is a resident of Memphis, Shelby County, Tennessee, and resides at 3583 Allandale, Memphis, TN 38111. Plaintiff Kernell is a voter registered in Shelby County, Tennessee. He has been a registered and eligible voter in Shelby County for decades. Plaintiff Kernell was a candidate for Shelby County School Board Commissioner in the August 2018 election, and voted

in said election. Plaintiff Kernell voted in the August and November 2018 elections, and intends to vote in the October 2019 municipal elections, and the August and November 2020 federal and state elections, and thereafter. The August and November 2020 elections include U.S. Senate and Congressional elections, as well as the U.S. Presidential election. Plaintiff Kernell suffered the fiasco, while a candidate for Shelby County School Board Commissioner on the ballot in August 2012, of thousands of voters in Shelby County being given the wrong ballot. This caused more than 720 voters to either incorrectly vote in the district Plaintiff Kernell was seeking election in, or to vote outside his district when they in fact resided in his district. His injury included expending campaign time and resources contacting voters who were then disenfranchised from voting for him even though they were registered and qualified voters residing in his school board district. He also was not notified by the Defendants to expend resources on other voters who were permitted to vote in his school board district although not residing in that district. After the election, and before certification, he repeatedly called the Defendant Shelby County Election Commission to obtain certified copies of the poll tapes for his district as allowed by state law, and was never afforded an opportunity to do so.

Plaintiff Kernell, as a voter in the November 2018 election, also observed improprieties while serving as a volunteer poll watcher at the Riverside satellite zone precinct memory card turn-in site on November 6, 2018. On election night, he observed only one election commission poll worker uploading memory cards containing votes from many precincts into an AccuVote TSX to remotely transmit the votes to the Defendant Shelby County Election Commission Operations Center in violation of State Rules 1360-02-13.23. The failure of the Defendants to devise uniform rules and regulations as to the handling of memory cards among other things, have deprived him (and if not addressed) will deprive him of his fundamental right to vote, including

the threat that illegal memory cards may be substituted or uploaded to void and/or dilute his vote. Due to the Defendants' maintenance of Shelby County, Tennessee's constitutionally defective voting system, Plaintiff Kernell. has a reasonable basis to believe that, absent injunctive relief, he will be disenfranchised or severely burdened in exercising his fundamental right to vote in future elections (including the October 2019 municipal elections), and that there is an overwhelming probability that votes will be miscounted in the future elections..

23. Plaintiff Joe Towns, Jr. was a candidate for re-election to the Tennessee State Representative (D-84) in August and November 2018, is a citizen and resident of Shelby County, Tennessee and resides at 4528 St. Honore Dr. Memphis, Shelby County, Tennessee 28116. Plaintiff Towns, Jr. is a qualified voter registered in Shelby County, Tennessee. He has been a registered and eligible voter in Shelby County for decades. Towns, Jr. voted in the August 2018 and November 2018 elections in Shelby County, Tennessee. Towns, Jr. intends to vote in each of the October 2019 municipal elections, and the August and November 2020 federal and state elections, and thereafter as a Memphis, Shelby County, Tennessee resident. He intends to seek reelection as Tennessee State Representative in 2020. Due to the Defendants' maintenance of Shelby County, Tennessee's constitutionally defective voting system, Plaintiff Towns, Jr. has a reasonable basis to believe that, absent injunctive relief, he will be disenfranchised or severely burdened in exercising his fundamental right to vote in future elections (including the October 2019 municipal elections), that there is an overwhelming probability that votes will be miscounted in future elections, and also severely burdened as to whether the votes cast for him in the upcoming 2020 elections will be properly cast and counted by the Defendants.

24. Plaintiff Ann Scott is a citizen and resident of Shelby County, Tennessee and resides at

3535 Faxon, Memphis, Shelby County, Tennessee 38122. Plaintiff Scott is a qualified and registered voter in Shelby County, Tennessee. Plaintiff Scott intends to vote in each of the October 2019 municipal elections, and the August and November 2020 federal and state elections, and thereafter as a Memphis, Shelby County, Tennessee resident. Due to the Defendants' maintenance of Shelby County's constitutionally defective voting system, Plaintiff Scott has a reasonable basis to believe that, absent injunctive relief, she will be disenfranchised or severely burdened in exercising her fundamental right to vote in future elections, including the October 2019 Memphis municipal elections, and that there is an overwhelming probability that votes will be miscounted in future elections..

25. Plaintiff Britney Thornton is a citizen and resident of Shelby County, Tennessee and resides at 1521 Cella, Memphis, Shelby County, Tennessee 38114. Plaintiff Thornton is a qualified and registered voter in Shelby County, Tennessee. Plaintiff Thornton intends to vote in each of the October 2019 municipal elections, and the August and November 2020 federal and state elections, and thereafter as a Memphis, Shelby County, Tennessee resident. Plaintiff Thornton also intends to seek election to the Memphis City Council in the October 2019 municipal elections. Due to the Defendants' maintenance of Shelby County's constitutionally defective voting system, Plaintiff Thornton has a reasonable basis to believe that, absent injunctive relief, she will be disenfranchised or severely burdened in exercising her fundamental right to vote in future elections, that there is an overwhelming probability that votes will be miscounted in future elections, and also severely burdened as to whether the votes cast for her in the upcoming 2019 elections will be properly cast and counted by the Defendants.

B. DEFENDANTS

1. Defendant Secretary

26. Defendant TRE HARGETT is sued for prospective declaratory and injunctive relief in his official capacities as the Secretary of State of Tennessee. Defendant HARGETT is hereinafter referred to as “Hargett”, or the “Secretary”. Hargett is a person within the meaning of 42 U.S.C. 1983 and was acting under color of state law at all times relevant to this Complaint. Service on the Secretary is made by serving Herbert Slatery, III, the Tennessee Attorney General and Reporter, at 301 6th Avenue, N., Nashville, TN 37243.

2. Defendants Tennessee Election Commission and State Board Members.

27. Together with the Secretary, Defendants Tennessee Election Commission (the State Board”), and Kent D. Younce, Judy Blackburn, Greg Duckett, Donna Barrett, James H. Wallace, Jr., Tom Wheeler, and Mike McDonald in their official capacities as members of the Tennessee Election Commission, are sued for prospective declaratory and injunctive relief (hereinafter collectively the “State Board members”). Service is made on the State Board and the State Board members by service on Herbert Slatery, III, the Tennessee Attorney General and Reporter, at 301 6th Ave., N., Nashville, TN 37243.

3. Defendant Coordinator of Elections

28. Defendant MARK GOINS is sued for prospective declaratory and injunctive relief in his official capacities as the Coordinator of Elections for the State of Tennessee. Defendant GOINS is hereinafter referred to as “Goins”, or the “Coordinator of Elections”. Coordinator of Elections Goins is a person within the meaning of 42 U.S.C. 1983 and was acting under color of state law at all times relevant to this Complaint. Service on the Coordinator of Elections is made by

serving Herbert Slatery, III, the Tennessee Attorney General and Reporter, at 301 6th Avenue, N., Nashville, Tennessee 37243.

4. Defendants Shelby County Election Commission and Shelby County Election Commissioners

29. Defendants Shelby County Election Commission (hereinafter the “Shelby Board”), and Robert Meyers, Norma Lester, Dee Nollner, Steve Stamson, Anthony Tate, in their official capacities as members of the Shelby County Election Commission (hereinafter collectively the “Shelby Board members”), are sued for prospective declaratory and injunctive relief. The Shelby Board maintains an office at 150 Washington, 2d Floor, Memphis, TN 38103. Service on the Shelby County Election Commission and the Shelby County Election Commissioners is made by serving Linda Phillips, Shelby County Election Administrator, 150 Washington, 2d Floor, Memphis, TN 38103.

5. Defendant Shelby County Election Administrator

30. Defendant Linda Phillips, is sued for prospective declaratory and injunctive relief in her official capacity as Administrator of the Shelby County Election Commission (the “Shelby Administrator”), which maintains an office at 150 Washington, 2d Floor, Memphis, TN 38103. Shelby Administrator Phillips is a person within the meaning of 42 U.S.C. 1983 and was acting under color of state law at all times relevant to this Complaint. Service on the Shelby County Election Commission Administrator is made by serving Linda Phillips, Shelby County Election Administrator, 150 Washington, 2d Floor, Memphis, TN 38103.

III. JURISDICTION AND VENUE

31. This Court has subject matter jurisdiction over each of the claims raised in this action pursuant to 28 U.S.C. 1331 (federal question jurisdiction); 1343 (jurisdiction over civil rights

actions), 1367 (supplemental jurisdiction), 2201 (jurisdiction to grant declaratory relief), and 2202 (jurisdiction to grant relief ancillary to declaratory judgment).

32. Venue lies in the Western District of Tennessee pursuant to 28 U.S.C. 1391(b) because multiple defendants reside in this judicial district and all defendants are residents of Tennessee and a substantial part of the events or omissions giving rise to the Plaintiffs' claims occurred in this judicial district.

33. This Court has the authority to enter a declaratory judgment and to provide emergency temporary, preliminary, and permanent injunctive relief pursuant to Rules 57 and 65 of the Federal Rules of Civil Procedure and 28 U.S.C. 2201 and 2202.

IV. LEGAL FRAMEWORK

A. The United States Constitution

34. The United States Constitution provides: "The time, places and manner of holding elections for Senators and Representatives, shall be prescribed in each state by the legislature thereof, but the Congress may at any time by law make or alter such Regulations, except as to places of chusing[sic] Senators." U.S. Const. Art. I, Sec. 4, cl. 1.

35. The *Fourteenth Amendment* to the U.S. Constitution, Sec. 1, states that "All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the State wherein they reside. No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws."

B. The Tennessee Constitution

36. The Tennessee Constitution provides that “the elections shall be free and equal, and the right of suffrage, as hereinafter declared, shall never be denied to any person entitled thereto, except upon conviction by a jury of some infamous crime, previously ascertained and declared by law, and judgment thereon by court of competent jurisdiction”. *Tenn. Const. Art. I, Sec. 5.*

37. The Tennessee Constitution provides that “all power is inherent in the people, and all free governments are founded on their authority, and instituted for their peace, safety, and happiness...” *Tenn. Const. Art. I, Sec. 1.*

38. The Tennessee Constitution provides that “..the free communication of thoughts and opinions, is one of the invaluable rights or man, and every citizen may freely speak, write and print on any subject, being responsible for the abuse of that liberty..”. *Tenn. Const. Art. I, Sec. 19.*

39. The Tennessee Constitution provides:

Sec. 1. Right to vote—Election precincts—Military duty.

Every person, being eighteen years of age, being a citizen of the United States, being a resident of the State for a period of time as prescribed by the General Assembly, and being duly registered in the county of residence for a period of time prior to the day of any election as prescribed by the General Assembly, shall be entitled to vote in all federal, state, and local elections held in the county or district in which such person resides. All such requirements shall be equal and uniform across the state, and there shall be no other qualification attached to the right of suffrage.

The General Assembly shall have the power to enact laws requiring voters to vote in the election precincts in which they may reside, and laws to ensure the freedom of elections and the purity of the ballot box.

...

Tenn. Const. Art. IV, Sec. 1.

40. The Tennessee Constitution provides:

[the] Legislature shall have no power to suspend any general law for the benefit of any particular individual, nor to pass any law for the benefit of individuals inconsistent with the general laws of the land; nor to pass any law granting to any individual or individuals, rights, privileges, immunitie[s] or exemptions other than such as may be, by the same law extended to any member of the community, who may be able to bring himself within the provisions of such law.

Tenn. Const. Art. XI, Sec. 8.

C. The Tennessee Election Code

41. All elections for public office in the State of Tennessee are conducted according to Tennessee Code Annotated, Title 2. *Tenn. Code Ann. 2-1-103.*

42. Under Tenn. Code Ann. 2-1-102:

2-1-102. Purpose.

The purpose of this title is to regulate the conduct of all elections by the people so that:

- (1) The freedom and purity of the ballot are secured;
- (2) Voters are required to vote in the election precincts in which they reside, except as otherwise expressly permitted;
- (3) Internal improvement is promoted by providing a comprehensive and uniform procedure for elections; and
- (4) Maximum participation by all citizens in the electoral process is encouraged.

43. The Tennessee Election Commission is a seven member board appointed by the Tennessee General Assembly. *Tenn. Code Ann. 2-11-204(b).*

44. Under Tenn. Code Ann. 2-1-111, “each person charged with the administration of any part of the election laws of this state” must take an oath swearing and affirming that he or she “will support the Constitution and laws of the United States and the Constitution and the laws of the State of Tennessee” and “will faithfully and impartially discharge of the duties” of the office.

45. The Tennessee Secretary of State appoints the Coordinator of Elections, who serves at the pleasure of the secretary of state. *Tenn. Code Ann. 2-11-201 (a).*

46. The Coordinator of Elections is the chief administrative election officer of the state “and shall obtain and maintain uniformity in the application, operation and interpretation of the election code”. *Tenn. Code Ann. 2-11-201(b)*.

47. The Coordinator of Elections, subject to the concurrence of the secretary of state, may make rules and regulations as necessary to carry out the election code provisions.
Tenn. Code Ann. 2-11-201(c).

48. The Coordinator of Elections, subject to the concurrence of the secretary of state, may “enter into such contracts for equipment as may be appropriate for the efficient discharge of the duties of the office.” *Tenn. Code Ann. 2-11-201(d)*.

49. The duties of the Coordinator of Elections includes: (1) general supervision of all elections; (2) advise election commissions, primary boards, and administrators of elections as to the proper methods of performing their duties; (3) authoritatively interpret the decision of election laws for all persons administering them; (4) investigate or have investigated by local authorities the administration of the election laws, including reviewing the county election commission in the administration of election laws, such as voting systems, certification of election results, and election results tabulation process.

Tenn. Code Ann. 2-11-202 (1), (3), (4), (5)(A)(i)(iii).

50. The Tennessee Coordinator of Elections and the Tennessee Election Commission must approve any voting machines before a county election commission purchases the machines.
Tenn. Code Ann. 2-9-117.

51. As of the 2002 election cycle, and “at least every eight (8) years thereafter, the state coordinator of elections and the state election commission shall reexamine all voting machines to ensure such machines still meet the minimum criteria for certification.”

Tenn. Code Ann. 2-9-117.

52. The Shelby County Election Commission (“The Shelby Board”) is a five member commission appointed by the state election commission, and maintains an office at 150 Washington Ave, 2d Floor, Memphis, TN 38103. *Tenn. Code Ann. 2-12-101 (a).*

53. The local election commissions are required to appoint an administrator of elections who is the chief administrative officer of the commission “and who shall be responsible for the daily operations of the office and the execution of all elections”. *Tenn. Code Ann. 2-12-201.*

54. The duties of the county election commission include, but are not limited to: (1) appoint the administrator of elections who is responsible for the daily operations of the commission office and the execution of all elections; (2) “upon the recommendation of the administrator” ..”approving any voting equipment to be purchased by the county for use by the commission”; (3) “certify all voting machines prior to each election” and “canvass all voting machines after each election”; (4) responsible for “certifying the results of each election in regard to official tabulations”... *Tenn. Code Ann. 2-12-116 (1), (3), (10).*

55. The county election commissioners are charged with setting “the proper ballot labels on the voting machines, and shall have the machines put in proper order for voting with the registering counters set at zero(000), the counting mechanisms locked, and each machine sealed with a pre-numbered seal.” *Tenn. Code Ann. 2-9-105(a).* However, any key locks on the voting machines utilized in Shelby County, Tennessee can be easily picked.

56. The county election commission must mail notices to the chairs of the local county executive committees of the political parties, and to independent candidates, advising as to when and where the voting machines will be examined. They may designate a representative “who

may be present to see that the machines are properly prepared for use in the election”. *Tenn. Code Ann. 2-9-105 (b)*.

57. The local election commission, or its designee(s), as soon as practical after the election “compare the votes from the tally tapes of all appropriate sources to the tabulated election results”. *Tenn. Code Ann. 2-8-104*. “All candidates, their representatives, representatives of political parties, and representatives of the press may be present during the process and shall be given ample opportunity to examine the tabulations.” *Tenn. Code Ann. 2-8-104*.

58. *Tenn. Code Ann. 2-9-104*, provides for police protection against tampering with or injury to the voting machines to be provided by local authorities after they have been prepared for and during an election.

59. For county election commissions using electronic voting machines for early voting, the “commission shall remove the vote totals according to rules promulgated by the coordinator of elections”. *Tenn. Code Ann. 2-6-304 (e)*. Notice must be provided to all candidates and political parties “of the place and time when the vote totals will be removed from those voting machines”. *Tenn. Code Ann. 2-6-304 (e)*. “In no event may the votes for any candidate be totaled until after all polls in the county are closed”. *Tenn. Code Ann. 2-6-304(e); State Rules, 1360-02-13-.28, “Early Voting Inspections for Electronic Machines-Election Commission Pre-Inspection”*.

60. In an election contest by a party as to the accuracy of the voting machines or the accuracy of the recording of the vote on the machines, the party may have the “machine or machines brought into the court to be examined by the parties or as evidence”. *Tenn. Code Ann. 2-17-110*.

61. Any election contest must be filed within five (5) days after certification of the election. *Tenn. Code Ann. 2-17-105*.

62. In 2008, the Tennessee General Assembly passed the Tennessee Voter Confidence Act mandating the use of precinct-based optical scanner voting systems—which scan and count voter-verified paper ballots¹—on or before the November 2010 general election. *Public Chapter 1008, Acts of 2008*. After being scanned and counted, the paper ballots are securely stored, which provides a voter-verified paper audit trail (VVPAT).

63. The Tennessee Voter Confidence Act was amended in 2010 to delay implementation until no later than the 2012 general election. *Public Chapter 612, Acts of 2010*.

64. In 2011, the Tennessee Voter Confidence Act was amended to authorize, rather than require counties to use precinct-based optical scanners. *Public Chapter 301, Acts of 2011*. Counties that use precinct-based optical scanners are required to conduct automatic audits of randomly selected voter-verified paper ballots cast in certain elections. *Tenn. Code Ann. 2-20101*. The amended law states that “every effort shall be made to purchase United States manufactured precinct-based optical scanner voting systems”. *Tenn. Code Ann. 2-20-106*.

65. Currently 14 counties in the State of Tennessee utilize voting equipment that produces a VVPAT.² Exb. “C”.

66. Two bills were introduced in the Tennessee General Assembly in 2018, but not passed, that would have required voter-verified paper ballots in Tennessee.³

67. According to the Tennessee Governmental Advisory Commission, Tennessee requires testing to the federal standards set by the US Election Assistance Commission (EAC).⁴

¹ See Tenn. Code Ann. 2-10-101 for definitions of “precinct-based optical scanner” and “voter-verified paper ballot”.

² Tennessee Advisory Commission on Intergovernmental Relations, “Election Study Update-Preliminary Information”, 9/6/18. (copy attached as Exhibit “A”).

³ Exhibit “A”; *Senate Bill 2438 by Yarbro and House Bill 2567 by Stewart*; *Senate Bill 2090 by Niceley and House Bill 2300 by Beck*.

⁴ Exhibit “A”, pg. 3.

However, the voting machines and systems in use in Shelby County, Tennessee are not identified as certified systems on the current EAC website⁵.

68. Studies have shown that the use of optical scan machines is less expensive in that only one optical scan machine is needed per precinct instead of the multiple machines used with the DREs with the paperless electronic touch screen voting system. Monies are saved in that less machines are needed to be programed, serviced, tested, stored and transported. ⁶

D. Tennessee's Regulation of Elections

69. The Secretary of State's Electronic Voting Machine Rules and Regulations (hereinafter "the State Rules"), state their intent as to (a) ensure that the "freedom and purity of the ballot is safeguarded"; (b) permit the county election commissions "with the approval of the Coordinator of Elections and the State Election Commission, to use alternative electoral devices"; (c) ensure "each voter's vote will be accurately and honestly counted"; (d) establish a "uniform procedure for the use of an electronic system of voting will be in use throughout the State of Tennessee"; and (e) ensure that the "total of votes cast will accurately reflect the will of the majority of voters voting in any given election". *State Rules, 1360-02-13-.02 "Intent of Regulations"*.

70. Under the State Rules, "no voting devices using electronic computers for the tabulations of the results of any election shall be certified in the State of Tennessee unless such computers may be programmed to".. "(d) accurately report the results of each such primary and general election individually". *State Rules, 1360-2-13-.07(d) "Certification of Voting Machines Using Computers to Tally Votes"*.

⁵ www.eac.gov/voting-equipment/certified-voting-systems/

⁶ PEW, "Aging Voting Machines Cost Local, State Governments", Mar. 2, 2016; <http://www.votersunite.org/info/costcomparison.asp>.

71. Under the State Rules, the certification for any county “may be withdrawn if, in the opinion of the Coordinator of Elections of the State of Tennessee or in the opinion of the Tennessee State Election Commission, a material violation of “the State Rules has occurred in any election”. *State Rules, 1360-02-13.08 “Withdrawal of Certification”*.

72. Under the State Rules, no county election commission or county governing body may purchase any electronic voting device that is not certified by the Coordinator of Elections with the approval of the State Board. If such electronic voting device has been certified, the county election commission or county governing body must make application to and obtain approval by the Coordinator of Elections and the State Board prior to purchase. *State Rules, 1360-02-13-.09, “Purchase by Counties”*.

73. Under the State Rules, the county election commission has a duty to investigate the electronic voting systems, and to not purchase any machines until they have been certified by the same. *State Rules, 1360-02-13-.13, “Investigation by County Election Commission”*.

74. Under the State Rules, the county election commission must “provide for the use of a computer capable of receiving and tallying all votes cast using electronic voting machines. The commission shall take adequate steps to insure that the program for each election is in its hands, and tested, at least twenty (20) days prior to each such election. “ *State Rules, 1360-02-13.17, “Computer Use”*.

75. Under the State Rules, the county election commission must institute safeguards to “completely clear the computer equipment before vote tallying commences”; secure the operating system and the application program; lock out unwarranted actions on the computer and log all actions; physically protect the computer after initial programming; program each memory cartridge to be used in the election and a seal; and “require written certification by appropriate

persons that the foregoing actions were properly taken”. *State Rules, 1360-02-13-.17 (a)-(e)*, “*Computer Use*”. However, it is not possible to completely clear the machines, as malware can remain. Further, under federal and state laws, the Defendants must retain and preserve all records and papers pertaining to voting in federal elections for 22 months, and any clearing of the machines violates those requirements. *52 U.S.C. 20701*. Moreover, voting machines seals are easily broken and replaced within seconds.

76. Under the State Rules, the memory cartridges and election materials are required to be transported in the company of a member of the other political party to the location designated by the county election commission from the polls. The officials shall travel in the same automobile and “shall not be permitted to stop except as required by law or emergency. At no time shall the memory cartridges and the certification materials be left unattended. “ *State Rules, 1360-02-13.23, “Transporting Memory Cartridges and Remaining Election Materials to County Election Commission”*; *Tenn. Code Ann. 2-7-138*.

77. Under the State Rules, the seals on early voting machines may not be removed until “after the close of polls on election day”. *State Rules, 1360-02-13-.31 “Early Voting Election Day Procedures (Closing Polls)*. Then, the “cartridge may be removed from the machine and mechanically read and printed to retrieve the votes cast. The paper tape may be removed from the machine and filed with the other early voting documents”. *State Rules, 1360-02-13-.31 “Early Voting Election Day Procedures (Closing Polls)*. However, there is no way to “mechanically read” the cartridges utilized in Shelby County, Tennessee as further explained below.

V. GENERAL ALLEGATIONS

A. The Voting Systems in Use in Shelby County

78. Shelby County currently uses the following software⁷:

- a. GEMS Software version 1.18.24.101 produced by Diebold, and rights acquired by ES & S [Election Systems & Software LLC], Election System Manger versions 9.4.004 with RPL version 3.1.019 and RPS version 2/6/002 & Election System Manager version 14.005 with RPL version 14.008, and RPS version 14.001 (all produced by Accenture, software);
- b. Software on the Flash card reader/duplicator version 2.6.12.2009-401 (unknown as to origin);
- c. Software on the Electronic Poll Books version 2.7.12.4 (without knowledge as to the origins)
- d. Software for voter card encoder (without knowledge as to version or manufacturer of this software);
- e. Software on TSX Voting Machines version 4.6.4.103 produced by Diebold;
- f. VC Programmer version 4/6/1 produced by Diebold.

(hereinafter collectively the “Shelby voting systems”).

79. The Shelby Board uses “Election Systems Manager (ESM), a voter registration application that interfaces with the GEMS software for election preparation and set-up, to capture pertinent data relative to voter registration and election officials, and as a reporting function for election data.”⁸

80. The GEMS 1-18-.22 was certified by the Tennessee Election Commission on January 11, 2006.⁹ The Diebold RFP Response to the Shelby County Government [“SCG”] dated December 12, 2005 states that the vendor Diebold Elections Systems, Inc. was in the process of applying to the State for certification of the GEMS software version 1.18.24 upgrade.¹⁰ The Diebold

⁷ Halbert v. Shelby County Election Commission, Shelby County Chancery Court, No. No. 15-1448 (2015), SCEC Interrogatory Response, No. 13.

⁸ Shelby County Government, “*Shelby County Election Commission Internal Control Study*”, Internal Audit Report No. 13-011, ov. 4, 2013, pgs. 5-6.

⁹ State of Tennessee Division of Elections Approved Voting Systems, Jan. 11, 2006

¹⁰ Diebold Request for Proposal Response to Shelby County Government, pg.3-12/12/05.

contract with SCG further has a large “X” marked through negating provisions that require that Diebold ensure enhancements and upgrades are fully certified by the State of Tennessee.¹⁰

81. On December 1, 2015, the minutes of the Tennessee Election Commission reflect that the Diebold/Premier/ES & S Gems 1-18-.22 was recertified despite the fact that no such system was present in Shelby County.¹¹ Exb. “D”. On July 8, 2013, the Tennessee State Election Commission approved list of voting machines only identified the Diebold/Premier/ES & S Gems 1-18-.22, with no mention of Gems 1-18.24.¹² Exb. “E”. The SCEC presently uses GEMS 1-18-.24¹³.

82. In January 2010, the Shelby County Government entered into a license agreement with Accenture LLP to “use the source code for ESM (“Source Code”) from Accenture, stating that “the County desire to modify and prepare derivative works based upon the Source Code and otherwise use the Source Code in support of its internal purposes”.¹⁴ It is unknown what modifications have occurred, this is an extraordinary occurrence that opens the door to election security vulnerabilities, and the Tennessee Elections Office has not produced any documents verifying that such modifications were ever certified.

¹⁰ The X also marked out the contractual provision requiring SCG to incorporate enhancements and upgrades received from Diebold within ten (10) days.

¹¹ Tennessee State Election Commission Approved Voting Machines Dec. 1, 2015.

¹² Tennessee State Election Commission Approved Voting Machines- July 8, 2013.

¹³ SCEC Interrogatory Response, No. 13, [Halbert v.SCEC Chancery Court lawsuit] March 2016; Newman. Et. al, v. Shelby County Election Commission, et. al, Shelby County Chancery Court, No. 10-1538, Transcript of Dennis Boyce Deposition Sept. 28, 2010 pages, 93:3-5. One IT professional consulted advised that .24 can not be certified now because the Windows platform is obsolete and the most vulnerable now.

¹⁴ According to an email of SCEC Administrator Holden in 2012, Shelby County purchased the source code for its Voter Registration software from Accenture. The system was originally sold by CMIS from Russellville, Arkansas. Shelby, Wilson and Sullivan counties purchased the VR system. The company was then sold to [Election.com](#) and later purchased by Accenture. Accenture decided to get out of the elections business due to inconsistent cash flow and excessive litigation. Shelby County then purchased the source code and located support vendors for the VR system in 2000. Accenture LLP License Agreement with Shelby County Government Jan. 25, 2010. ¹⁶015 RFQ of Shelby County, TN for Replacement of Election Management System [ESM] Software , pg. 3.

83. The ESM is no longer supported by the vendor, and instead the Shelby Board has relied upon an independent consultant who resides out of state.¹⁶ In fact, in a 2015 RFQ for Replacement of Election System Management Software, the County states that “the absence of vendor support for the critical and obsolescent software presents an unacceptable risk to the election delivery capability and operation of the election commission.”¹⁵

84. The Shelby County Election Commission also uses the AccuVote-TSx R7 voting devices (hereinafter “AccuVote DREs”). “Results are stored to both an external PCMCIA memory card as well as internal flash memory”.¹⁶ “All election information specific to the vote center, including races, candidates and ballots are programmed onto PCMCIA memory cards from GEMS. The PCMCIA memory card acts as primary storage location for the AccuVote-TSx, with the internal flash memory acting as secondary, backup storage. In the course of voting, all ballots cast are stored on the memory card as well as internal flash drive memory.”¹⁷ “Memory cards and AccuVote-TSx units are interchangeable; the AccuVote-TSx assumes the identity of the currently active election on any installed programmed memory card.”¹⁸ Smart cards are used for each voter to record his or her votes on the voting machine.²¹ Experts advise that smart cards can be used to cast as many votes as a holder wants.

85. After the polls close, the memory cards for each voting machine can be inserted into one machine to accumulate the votes from that precinct.¹⁹ Each voting machine has a “modem”

¹⁵ , 015 RFQ of Shelby County, TN for Replacement of Election Management System [ESM] Software pg. 3.

¹⁶ Diebold AccuVote TSX Hardware Guide 2007 , [Overview].

¹⁷ Diebold AccuVote TSX Hardware Guide 2007, 2.2.3.

¹⁸ Diebold AccuVote TSX Hardware Guide 2007, 2.2.3

Diebold AccuVote TSX Hardware Guide 2007, 2.2.4.

¹⁹ Diebold AccuVote TSX Hardware Guide 2007, 2.2.5.

²¹

“which may easily be removed from the unit base”, and then “connect the telephone jack located within the Ethernet PCMCIA slot on the tablet to a wall phone jack”.. for uploading results.²⁰

Thus, each AccuVote TSx has the capability to be connected to the internet, possibly even with a cell phone. The practice for the SCEC has been for the AccuVote DRE units to be used as an intermediate device for electronic transmission of ballot data collected on TS units from designated satellite Zone Turn-in Sites to the Shelby GEMS server. Memory cards are brought by precinct poll officials to five or six satellite Zone Turn-in Sites on election night. The memory cards can also be brought to the Election Offices for uploading, and tabulation.

86. The use of the AccuVote DREs makes Tennessee’s elections unverifiable, unauditable, and vulnerable to undetectable manipulation. AccuVote DREs create no verifiable record of voter intent, paper ballot or paper verification of the votes cast, unlike optical scanner components that rely on a voter-marked paper ballot as a verifiable official record.

87. Each AccuVote DRE internally contains much of the same hardware that might typically be found in an inexpensive general-purpose desktop computer in use in the early 2000s.

88. The software that Shelby’s AccuVote DREs run is a Diebold-modified version of Microsoft’s Windows CE operating system—which Microsoft stopped supporting in years past. As a consequence, Microsoft is no longer issuing updates or security patches for that software.

89. The proprietary Ballot Stations (Diebold software application) runs on top of the Windows operating system on AccuVote DREs and provides the user interface that voters and poll workers see. The Ballot Station interacts with the voter, accepts and records votes, and the GEMS software counts the votes recorded on the DRE, and performs all other election-related processing by the DRE.

²⁰ Diebold AccuVote TSX Hardware Guide 2007, 2.2.6, 2.2.

90. AccuVote DREs are configured for each election by inserting a memory card into a slot behind a locked door on the side of the machine.

91. Before the election, the file system on the memory card stores the election definition, sound files, translations for other languages, interpreted code that is used to print reports, and other configuration information.

92. AccuVote DREs use software installed on the unit to display graphical information to the voter that indicates which part of the touchscreen display corresponds to particular electoral choices.

93. Voters record their preferences by physically touching the part of the screen that corresponds to the voter's preferred choice.

94. When operating properly, AccuVote DREs use software installed on the unit to translate the voter's physical act of touching a particular place on the touchscreen into a vote for the corresponding candidate or issue.

95. When operating properly, AccuVote DREs use software installed on the unit to change what is graphically displayed on the touchscreen to indicate to the voter that a particular electoral choice has been electronically registered by the unit.

96. When operating properly, AccuVote DREs use software installed on the unit to record the voter's choice on both the DRE's removable memory card and into the machine's internal flash memory. The voters are unable to observe how their vote is recorded.

97. Shelby County's AccuVote DREs do not record a paper or other independent verifiable record of the voter's selections.

98. Upon the closing of the polls, poll workers cause AccuVote DREs to interpret collected electronic information and print a paper tape of vote totals recorded on each machine.

99. After the tape of the DREs machine's vote totals is printed, the removable DRE memory cards are taken from each of the AccuVote DREs and secured for transport either to a satellite Zone Turn-In satellite vote transmission center, or directly to the county election annex offices.

100. On election night, AccuVote DRE memory cards from polling places are collected and uploaded into the Diebold GEMS server (running on a desktop computer) either via remote transmission from the satellite Zone-Turn In site, via AccuVote DRE machines at the county election annex offices, and/or directly into the Diebold GEMS server (running on a desktop computer) where the GEMS software then combines DRE vote data with data from mail-in absentee ballots. On Election Day or night, the early voting machines are removed from storage, set up, and memory cards removed from each of the AccuVote DREs used during early voting.

101. On Election Day or night, the early voting memory cards are uploaded to the Diebold GEMS server (running on a desktop computer) by election workers via approximately twenty AccuVote DRE voting machines set up in a separate part of the county election annex offices.

102. The GEMS software combines the DRE early vote data with the Election Day DRE data, and consolidated preliminary reports are created called the Unofficial Statement of Votes Cast, and printed.

103. Mail-in absentee paper ballots and provisional ballots are scanned and tabulated by Diebold AccuVote Optical Scan units, located in the county election annex offices.

104. The Diebold AccuVote Optical Scan units are programmed with software to scan, count, tabulate and report the paper ballot vote counts.

105. On election night, Diebold AccuVote Optical Scan unit memory cards are uploaded to the Diebold GEMS server and combined with data from the AccuVote DREs to create unofficial consolidated results and generate reports.

106. Many of the poll officials and workers, including supervisors, hired by the Shelby County Election Commission are not properly trained in the use of the Shelby voting systems, including voting machines, software, and voting equipment. There is a fundamental failure to properly supervise and direct the proper conduct of elections by the Defendants, the training is so reckless or grossly negligent that misconduct was and is almost inevitable or substantially certain to occur, and as a whole there is a chronic failure to train election officials, staff, commissioners, and poll workers in the county.

B. AccuVote DREs Are Insecure and Vulnerable to Malicious Hacking

107. Over the past year, news reports have abounded that paperless balloting is unreliable, insecure, and unverifiable because it can not be audited.

108. In January 2017, the U.S. Department of Homeland Security (DHS) designated elections as “critical infrastructure” to more formally make election infrastructure “a priority for cybersecurity assistance and protections” and allow DHS to provide cybersecurity assistance to state and local election officials who request the same.²¹

109. In the fall of 2017, the State of Virginia decertified all DRE touchscreen voting machines requiring 23 cities and counties to purchase new voting machines only weeks before the November 2017 elections.²²

²¹ Exhibit “A” pg. 7.

²² <https://politics.myajc.com/news/state--regional-govt--politics/judge-will-decide-whether-order-georgia-voters-use-paper-ballots/AZrL8megsykBm8zf5sbTJP/>; The Washington Post, “Paper ballots make a come-back in Virginia this fall” October 7, 2017.

110. The DHS also launched its Elections Infrastructure Information Sharing and Analysis Center (EI-ISAC) in March 2018, which provides elections-focused cyber defense assistance to state and local elections offices nationwide.²³ In 2018, the DHS announced that it provides at no cost to the state and local government and officials who request the following: cybersecurity assessments, such as cyber hygiene scanning, risk and vulnerability assessment, and cyber resilience reviews, cyber threat hunting and enhanced cyber services, 24/7 incident response, cybersecurity training among other services.²⁴

111. In January 2018, the Congressional Task Force on Election Security issued a Final Report addressing the insecurity of the voting infrastructure in the United States. The Final Report stated:

Given the breadth of security risks facing voting machines it is especially problematic that approximately 20% of voters are casting their ballots on machines that do not have any paper backup. These voters are using paperless Direct Recording Electronic (DRE) machines that have been shown over and over again to be highly vulnerable to attack. Because these machines record votes on the internal memory of the machine, and do not leave any paper backup, it is near impossible to detect whether results have been tampered with.²⁵

112. The U.S. Senate Select Committee on Intelligence issued a summary of its investigation into Russian targeting of election infrastructure during the 2016 election, after months of hearings and investigation.²⁶ Among other things, the Committee issued a strong recommendation for VVPAT.²⁷

113. These findings are in accordance with those of research studies commissioned by

²³ Exhibit “A”, pg. 7.1

²⁴ <https://www.dhs.gov/topic/election-security>

²⁵ Congressional Task Force of Election Security, *Final Report*, <https://democratshomeland.house.gov/sites/democrats.homeland.house.gov/files/documents/TFESReport.pdf>.

²⁶ Exhibit “A”, pg. 8.

²⁷ Exhibit “A”, pg. 8.

California's then Secretary of State Debra Bowen, and also by Ohio's Secretary of State Jennifer Brunner in 2007 regarding the Diebold AccuVote voting system.

114. The "Top-to-Bottom Review" of California's voting system found that the AccuVote DREs were "inadequate to ensure accuracy and integrity of the election results.."; that the system contained "serious design flaws that have led directly to specific vulnerabilities, which attackers could exploit to affect election outcomes.."; and that "attacks could be carried out in a manner that is not subject to detection by audit, including review of software logs."²⁸

115. The Evaluation and Validation of Election Related Equipment, Standards and Testing ("EVEREST") also concluded that Ohio's voting "system lacks the technical protections necessary to guarantee a trustworthy election under operational conditions. Flaws in the system's design, development, and processes lead to a broad spectrum of issues that undermine the voting system's security and reliability. The resulting vulnerabilities are exploitable by an attacker, often easily so, under election conditions".³²

116. Citing the failures and vulnerabilities of the Diebold's AccuVote voting system identified in the commissioned report, Secretary of State Bowen decertified California's voting system.²⁹

117. The only record of a voter's selection kept by Shelby County's AccuVote DREs is the digital record created in the DRE's computer memory by the executable software that is installed on the individual DRE voting unit. This digital record is only as trustworthy as the software that writes the information to memory.

²⁸ California Secretary of State, *Withdrawal of Approval*, <http://votingsystems.cdn.sos.ca.gov/vendors/premier/premier-11824-revision-1209.pdf> (Dec. 31, 2009 rev.), at 2,2,3.

³² Pennsylvania State Univ., et al., *EVEREST: Evaluation and Validation of Election-Related Equipment, Standards and Testing*, <https://www.eac.gov/assets/1/28/EVEREST.pdf> (Dec. 7, 2007).

²⁹ See *Withdrawal of Approval*, supra fn. 31, at 5.

118. As indicated by the TTBR, EVEREST, and other reports, the design of the AccuVote DREs permits unauthorized, surreptitious manipulation of software installed on individual machines that causes the AccuVote DREs to record and report false votes and that is, for all practical purposes, undetectable by election officials.

119. As indicated by the TTBR, EVEREST and other reports, the results produced by an AccuVote DRE are not reliable because the machine's software, which is responsible for correctly recording voter choices, is subject to undetectable manipulation.

120. As indicated by the TTBR and EVEREST reports, the results produced by an AccuVote DRE are not trustworthy because the unreliable software is likewise responsible for reading the DRE unit's memory and reporting the recorded results.

121. Due to the foregoing, the AccuVote DREs do not permit meaningful recounts.

122. Because the Defendant Secretary and the manufacturer and vendor of the AccuVote DREs and GEMS 1.18.24 software contend that the software is proprietary, the public is unable to determine whether the machines might have been subject to erroneous programming, tampering or manipulation.

123. Flaws in the AccuVote DREs could render the Plaintiffs' votes meaningless or worse, record a vote for someone the voter did not vote for, without any means for the voter to verify his vote.

124. In 2002, Congress enacted the Help America Vote Act (HAVA) which provided \$3 billion to states to replace punch card and lever voting systems with new technology and mandated statewide voter registration systems. Tennessee received over \$57 million and used some funds to replace voting equipment and implement a statewide voter registration system.³⁰

³⁰ Exhibit "A", pg. 6.

125. About \$28 million of the aforesaid \$58 million dollars Tennessee received from the HAVA has not yet been spent, with approximately \$15 million designated for new voting equipment and \$13 million for voter registration system updates, administration, accessibility, and training expenditures.³¹

126. In March 2018, the Consolidated Appropriations Act of 2018 was signed into law, which includes \$380 million in grants for states to improve the election system (in addition to the remaining HAVA funds from 2002). States can use these funds to replace non-VVPAT equipment with VVPAT equipment. Tennessee is eligible to receive \$7.6 million of these funds.³⁶

127. The custom and policy of the Defendants Secretary, Tennessee Election Commission, State Board Members, Coordinator of Elections, Shelby County Election Commission, Shelby Board Members, and Shelby Administrator to permit the use of the antiquated AccuVote DRE's and GEMS 1.18.24 software in Shelby County elections denies the Plaintiffs their fundamental right to vote.

128. The custom and policy of the Defendants Secretary, Tennessee Election Commission, State Board Members, Coordinator of Elections, Shelby County Election Commission, Shelby Board Members, and Shelby Administrator to permit the use of the Shelby voting systems, including AccuVote DRE's and improperly modified and outdated GEMS 1.18.24 software, in Shelby County elections was designed and implemented with the intent of disenfranchising Shelby County voters, the majority of whom are African American.

³¹ Exhibit "A", pg. 7.

³⁶ Exhibit "A", pg. 7.

129. The Secretary, majority of the State Board, Coordinator of Elections, majority of the Shelby Board, and Shelby Administrator are white.

C. Voting on Thin Ice Report

130. The SAVE members have published a Report titled *Voting on Thin Ice*, which reports the results of open records requests and investigation over five years. (copy attached as Exb. “F”).³² The facts stated in this section of this Complaint are set forth more fully in the Report. Exb. “f”.

131. The SAVE members began work after the August 2, 2012 elections wherein thousands of Memphis and Shelby County citizens were given the wrong ballot. A SAVE member, Dr. Joseph Weinberg discovered and alerted the Shelby Board about the voters being given the wrong ballots as early as July 18, 2012 during early vote, along with a candidate for county commission.³³

132. After repeated requests by Weinberg, action was finally taken by the Shelby Board to correctly assign the misassigned voters, but the official voter records were being altered during the process so as to appear that the misassigned voters voted in the correct district. After Dr. Weinberg’s complaint to the Shelby Board, Coordinator of Elections, and State Board, he was informed that the state had instructed the county how to avoid altering the record, but the pattern continued. Even one Shelby Board Commissioner was “appalled to read that the participating voter list is being changed to reflect votes in districts that the voter didn’t actually vote in”, wondering if it would “corrupt” the list.³⁴

133. Disenfranchised citizens reported being given the incorrect ballot, with one saying she voted in two school board district races although only one should have been on her ballot. David

³² Exhibits available via www.votingonthinice.com.

³³ Emails between Dr. Weinberg and SCEC July 18, 2012.

³⁴ Email of Election Commissioner Myra Stiles July 24, 2012.

Holt, a voter in the state legislative district of Michael Kernell was provided the wrong ballot when attempting to early vote. Kernell's name was not on the ballot of the electronic voting machine. Exb. "G ".³⁵ He was encouraged to cast his vote by a polling official regardless of the error, and he refused. Exb. "G ". Subsequently, he spoke with Shelby County Election Commissioner Norma Lester, and went by the Shelby County Election Commission annex speaking with Commissioner George Monger, Joe Young (a supervisory employee), and the then Administrator Richard Holden. Exb. "G ". The misassignment as to his voting district was eventually corrected, but if he had not been persistent his vote would have been recorded in the wrong state legislative district. Exb. "G ". The process was a severe barrier to casting his fundamental right to vote. Exb. "G ". Several state legislators wrote a joint letter to state election officials calling for an investigation.³⁶

134. In addition, about 132 election commission poll workers had to pick-up microchips from the Shelby Board annex, and receive training on election night for the insertion of the chips into the electronic poll books.³⁷ Presumably they took the microchips home with them, thus constituting a total failure of any election security as to the electronic poll books used the next day.

135. The then Shelby Board Administrator Holden was suspended briefly in September 2012, and placed on probation.³⁸ News reports in October 2012 confirmed that over 3000 voters had been given the wrong ballot, and their votes were not counted.³⁹ Also, dozens of voter registration applications had not been processed between March 2012 and January 2013. Exb.

³⁵ Emails between Dr. Weinberg and SCEC July 30, 2012.

³⁶ Joint Letter of Several Legislators to State Election Officials Aug. 14, 2012.

³⁷ Chumney Letter to DOJ: Public Integrity Section- Aug. 7, 2012.

³⁸ Tennessee State Election Commission Meeting Minutes Sept. 10, 2012.

³⁹ *The Commercial Appeal*, "State audit cites Shelby's "inability to conduct elections without significant inaccuracies", Oct. 2, 2012.

“H”. An internal Shelby County Government audit found 19 items of high risk to the commissions’ operations, including the inability of auditors to identify election employees who processed or changed some voter registration records. And, a pollster made claims that there had been a 28 percent purge or decrease in registered voters on the Shelby County rolls in 2012, which was referred to the Tennessee Secretary of State for investigations. Exb. “I”.

136. Despite reassurances that the problems would be fixed before the November 2012 election, again some voters were wrongfully turned away at the polls due to being labeled “inactive” voters; one voter reported being given a ballot without a gas tax referendum; an internal poll watcher reported that the Shelby Board internal system showed 801 had voted at one precinct but the total accumulator only showed 293 votes; others were not allowed to vote although timely submitting voter registration forms; and more voters were found to be listed in the wrong district.⁴⁰

137. One Shelby Board Commissioner in an email to Dr. Weinberg in November 2012, wrote that “I think manipulation occurs inside the Commission either at turn in zones during the course of reconciliation and possibly during tabulation.” She elaborates, “It is a mess and I don’t fully understand. It occurs every night during early vote and was the major reason totals weren’t posted on the web every day. They couldn’t get the totals to balance. I worry about what they do to make them balance.” The Commissioner added, “There has been rumors that ballots have been backed out but I have not been able to prove”. Exb. “J”.

138. Over the years there have been ongoing reports of irregularities with the Shelby County Elections as noted by Tennessee Secretary of State, Tre Hargett. On July 26, 2012, he wrote Justin Wilson, Tennessee Comptroller of the Treasury and stated that as of that date one

⁴⁰ City of Memphis-City Attorney’s Office Election Integrity Task Force, “*Report on November Election Issues, 2012*”.

thousand voters had been given the wrong ballot during early voting. Exb. “A”. He believed even more voters were given the incorrect ballot thereafter through Election Day. Exb. “A”.

Additionally, he states that voters in an area annexed by Collierville last year were found not to be listed as residents of the municipality. Exb. “A”.

139. Secretary Hargett further stated that “These recent issues are just the latest in a series of errors in the Shelby County Election Commission stretching back at least a decade. Nearly every election cycle in the county in recent memory has been plagued by a myriad of errors and complaints of wrongdoing.” Exb. “A”.

140. As Secretary Hargett relays, “In 2010, an election official loaded the wrong information onto an electronic poll book which indicated that thousands of individuals had already cast a ballot when they in fact had not. In 2006, candidates sued the county election commission alleging that irregularities had affected the outcome of the county general election. A 2005 special election to fill a vacant seat in the Senate was voided based on a showing that ineligible felons and deceased individuals had voted in the election.” Exb. “A”.

141. Secretary Hargett states that “together [these examples] indicate a troubling pattern of errors that cannot go unnoticed. These errors have eroded public confidence in the Shelby County Election Commission ..”. Exb. “A”.

142. On July 2, 2012, Richard Holden, the then Shelby County Election Administrator reported that invalid characters were reported in the political party field in the school run-off election on December 7, 2010. Since there was no D or R ballot, the space usually holding that D or R was recorded as an “invalid” blank space.

143. The Shelby County Chancery Court in August 2013, ordered the Shelby County Election Commission to conduct a new election for countywide school board District 4 where some voters

residing within the district in the August 2012 election, had a different school board race on their AccuVote DRE ballots and other voters residing outside the district had the District 4 race on their ballots.⁴¹ Candidate Kenneth Whalum, Jr. successfully contested the results in the trial court, although reversed on appeal. And, prior to that another Chancellor ruled that the results in the 2012 Millington sales tax hike referendum were to be overturned after Millington city officials contested the certified vote count on the basis that some voters who did not live in Millington were allowed to vote when their votes shouldn't have been counted.⁴²

144. Secretary of State Hargett and Mark Goins, the Tennessee Coordinator of Elections asked the Tennessee Comptroller to conduct an audit of the Shelby County Election Commission Administration. Exb. "A". While the Tennessee Comptroller did conduct an audit, it only "focused on the period January 1, 2012, through July 31, 2012.." except as otherwise warranted, and was "limited to a review of the redistricting activities leading up to and during the 2012 elections." From the report, there was no review or investigation or forensic audit of the voting machines, tabulators, or regarding other complaints raised.⁴⁸

145. When Plaintiff Mike Kernell wrote a letter to the Comptroller asking questions about the limited scope of the audit, he received a cursory response the next day that "we limited the scope of the review based on the time and resources we had available." In March 2013, Dr. Weinberg also wrote Tennessee Secretary of State Hargett about the November 2012 problems of voters receiving the wrong ballot, and the Comptroller's lack of serious and thoughtful response to Kernell's letter (or recommendations). Dr. Weinberg asked Hargett to request the Comptroller or other consultant with the necessary computer expertise to perform a thorough evaluation.⁴³

⁴¹ Whalum v. Shelby County Election Commission, 2014 Tenn. App. LEXIS 612.

⁴² The Daily News, "Goldin Overturns Millington Sales Tax Vote", 10/9/2012.⁴⁸ Tennessee Comptroller Audit Report Oct. 2, 2012.

⁴³ Dr. Weinberg email to Tennessee Secretary of State Hargett in November 2012.

146. In October 2013, Dr. Weinberg wrote a report to the Shelby Board asking that the voting machines be replaced as outdated, and questioning whether the machines had ever been updated for security purposes.⁴⁴ Despite discussing purchasing new machines and that federal monies were available, the Shelby Board did not take action.⁴⁵

147. Thereafter, due to the continuing problems, in November 2013, the SAVE members began open records requests to the Shelby Board. They also reported the problems to the FBI and DOJ: Public Integrity Section [Washington DC].

148. The records produced from the open records requests showed that some 21 memory cartridges were uploaded for the precinct COR 09 *before* the polls closed on August 2012 election day, and 9 thereafter, even though only 9 voting machines had been assigned to that precinct (one memory cartridge is assigned for each voting machine); that a database was sent from the election software vendor and no results were found; it was then reported to being sent to Canada for research; the election was certified prior to the solution being identified; and ES & S technician had access to the tabulation server without any supervising Shelby Board official; and many other documented irregularities. Exb. "F".

149. Because of the irregularities found, a letter was submitted to the DOJ, Asst. U.S. Attorney for the Western District of Tennessee, and FBI early on August 7, 2014 detailing the findings, asking for an audit and investigation, inspection of the voting machines and tabulator by a computer and elections expert. A follow-up letter was sent on August 27, 2014 again reporting that COR 09 was the precinct identified by ES & S as causing problems with certifying the results some 19 days after the August 2, 2012 election. The follow-up letter noted that it was

⁴⁴ Dr. Weinberg Report to SCEC- October 3, 2013.

⁴⁵ The Commercial Appeal, "Election Commission Looking at Problems", Jan. 20, 2013.

reported in the *Commercial Appeal* that two federal monitors were in town on August 7, 2014, but did not observe or inspect the tabulation process on that date despite the request transmitted on the same date. A forensic evaluation of the voting machines, tabulator and computer data was requested. There was no response. Exb. “F”.

150. Dr. Weinberg uncovered voters misassigned again in the August 2014 elections and notified the Shelby Board and Shelby County Government IT department.⁴⁶

151. In 2015, more election irregularities were reported regarding some voters being given the wrong ballot in a City Council district race, and all memory cartridges not uploaded in the Shelby County General Session Criminal Court Clerk’s election.⁴⁷ The SAVE group submitted additional open records requests related to this election, the August 2012 election and others, this time including requests to the Tennessee Election Coordinator, and the Shelby County Court Clerk. Exb. “F”.

152. Despite open records requests to the Tennessee State Election office, Shelby County Clerk, and Shelby Board to review the early vote poll [tally] tapes and Certificates of Results for the August 2, 2012 election, they all only produced Election Day poll tapes from the archives. No early vote poll tapes were produced for the August 2, 2012 election. There also were no early vote tapes at the Tennessee State Election office for the August 2010 election, with only Election Day poll tapes produced for those elections in 2010 and 2012. And, even though the records show that an inquiry was made by a Shelby Board official about backing up the ballot images inside the AccuVote DREs for the August 2, 2012 election, the Shelby County Election

⁴⁶ Emails of Dr. Weinberg with Shelby County Govt. IT Aug. 7, 2014.

⁴⁷ <http://www.vibincblog.com/boot-holden/>; <http://wreg.com/2016/01/26/wanda-halbert-election-commissionappear-in-court-over-election-results/>

Commission has refused to produce those images claiming that they are not public records.

Therefore, the Plaintiff SAVE was unable to review them to verify the accuracy of the reported results.⁴⁸

153. In fact, open records responses of emails produced between state officials and the Shelby Board on September 26, 2012, show that the total results sent by the Shelby Board to the State Election officials did not match the computer print-out submitted. The Certificate of Results with numbers that did not match was undated. However, the state election officials accepted the report “with a promise that you will look into this issue and that we will not have this issue in the future. Everything should match”. Exb. “F”. To the best of our knowledge the public and candidates were never notified, and the emails are weeks after the deadline a candidate was required to file suit in order to challenge election results in court.

154. In the October 2015 election, at least 7 memory cartridges, some from mostly African American voter precincts and representing hundreds of votes, were not uploaded until between 11 and 22 days after Election night. A citizen took a photo of a poll tape at one heavily African American voter poll, and compared it to the Unofficial Statement of Votes Cast. Finding a large discrepancy in the votes, a candidate reported it to the Shelby Board. An memo from the Shelby Board Operations Manager to the Election Administrator on October 26, 2015 states that the vendor did not mention anything about incomplete uploads, although the Deputy Administrator reported that he saw the ES & S operating GEMS before he left for the downtown election offices. Once again, from the emails produced, it appears that the election was certified even though all of the data about the problems was not available. Exb. “F”.

⁴⁸ The Shelby Board’s position on the ballot images has been inconsistent. Initially, when Dr. Weinberg requested the images, they denied that they existed. Then when the SAVE group referenced their existence in the ES & S election manuals the Shelby Board produced ballot images for a City Council election in October 2015.

155. The GEMS Reference manual produced from open records to the Shelby County Election Commission states that the number of memory cards value entered in the system's Vote Center Editor may be altered even when the election status is "Set for Election", and that decreasing the number of memory cards assigned to the Vote Center when the election status is "Set to Election" may cause programmed or uploaded memory cards [cartridges] to be lost. This means that votes hundreds or thousands of votes could be lost if the alteration occurs and not all memory cartridges are not uploaded.

156. Even more troubling was the Shelby Board's practice, of only requiring the independent accountants' report to compare a sampling of precinct vote totals from the election results summary to the votes recorded on the machine tapes generated by the Shelby AccuVote DREs. Because of the scope of the agreed upon procedures, the CPAs disclaimed that it was an audit, or any opinion on the accuracy of the tabulation of the votes or the integrity of the election process. There is no record of what poll tapes were in the sample, or how it was derived. Thus, there was no true independent audit of the results.

157. Also, the Shelby Board will not produce the Shelby County GEMS AVServer logs [audit trail] for review despite open records requests, contending that it is not a public record.

158. One Shelby Board Commissioner, Norma Lester, expressed concerns on the record about the "discrepancies in the [October 2015] election night totals and those presented for certification."⁴⁹ Exb. "F". She further raised the issue of the need for a forensic audit. In July 2013, she had also complained about the "vendor having unfettered access to Security Code and Server" at the Shelby Board offices. Exb. "F".

⁴⁹ SCEC Meeting Minutes Oct. 23, 2015.

159. On August 31, 2016, Bruce Gear, with the DOJ Voting Section [Washington DC], and Raymond Hulser, Chief, DOJ: Public Integrity Section [Washington DC] were written separately, detailing the prior letters, advising of the 2015 October new election irregularities with admitted vote total switching observed on televised returns, and some voters once again given the wrong ballot.⁵⁰ The letter further mentioned the reported approximately 100 vote variances noted up or down in some races from the audited results, the several memory cartridges not read on election night, with no mention by the ES & S vendor of incomplete uploads, and that a lawsuit was filed by a candidate in the Shelby County General Sessions Court Clerk's race where a citizen had taken photos of poll tapes at an election day poll which differed from the unofficial reported results.⁵¹ Exb. "F".

160. The letter to Gear and Hulser, further advised of an ES & S report to the SCEC in 2013 that the tabulation server room was not secure, and had been plugged into the county network exposing it to hacking, virus and malware.⁵² The 2013 ES & S report further found that the Shelby Board tabulation server room could be accessed by many people "which makes it difficult to defend against allegations of tampering".

161. This occurred despite a 2007 official state report that raised the same concerns with regard to Shelby County, as well as unauthorized software on its system that could allow manual editing of the GEMS database file, audit log, and election results.⁵³ More alarming was the finding that "someone was attempting to edit saved Diebold election summary reports, perhaps to agree with altered vote totals in the Diebold Microsoft Access database file". In addition, the

⁵⁰ Chumney Letter to Bruce Gear, DOJ Voting Section Aug. 31, 2016 & Raymond Hulser, Chief, DOJ: Public Integrity Section – Sept. 1, 2016.

⁵¹ *Wanda Halbert v. Shelby County Election Commission*, Shelby County Chancery Court, No. CH-15-1448.

⁵² Shelby County Election Process Final Report, Jan. 7 2013.

⁵³ "Trust But Verify: Increasing Voter Confidence in Election Results", Tennessee Advisory Commission on Intergovernmental Relations [TACIR] 2007 [Appendix A].

report noted a critical security breach where unauthorized software had been installed which would allow “unfettered remote access to the central tabulator to anyone connected to the county government network or the Internet”. The Report expressly states that “the GEMS central tabulator should absolutely NOT be connected to any network via Ethernet card, wireless network card, infrared port, USB port or modem”.

162. The 2007 TACIR report concluded that “the real threat for wholesale election fraud lies with the Diebold central tabulator”. It added that “unless Shelby County election officials can be seen as conducting a good faith investigation as to who had access to this central tabulator PC and the above unauthorized software and who actually did the illegal install, voters in this county (and ultimately the state) can have no confidence in the integrity of the November 2006 election”. An recent open records request to the Shelby Board for any documents on any investigation regarding the 2007 report, resulted in a response that it had no documents responsive to the Request. Exb. “K” and “L”.

163. The group’s 2016 letter to the DOJ asked what the FBI had determined from the prior letters of 2012 and 2014, and again asked for action.⁵⁴ No response was received.

164. Open records documents and emails produced further show that a database was sent on August 20, 2012 to the ES & S vendor in an insecure manner. Exb. “F”. According to Dennis Boyce, a Shelby Board employee, in 2010 under oath, the databases are regularly sent to the ES & S vendor to “fix”.⁵⁵ And, the user login, password and instructions to login for an updated voter file was *emailed* to State officials on July 27, 2012 by a Shelby Board official. Exb. “F”.

⁵⁴ Chumney Letter to Bruce Gear, DOJ Voting Section Aug. 31, 2016 & Raymond Hulser, Chief, DOJ: Public Integrity Section – Sept. 1, 2016.

⁵⁵ Newman, et al, v. Shelby County Election Commission, Shelby County Chancery Court, No. CH-10-1538, Transcript of Dennis Boyce Deposition Sept. 28, 2010, 52: 12-21.

165. A Shelby Government Internal Audit in 2013 found that “temporary and permanent staff were identified as having administrative rights to ESM similar to the system rights granted to the Shelby Board Administrator, which would allow full permission to make adjustments to the application. This would allow adjustments to the security administration, such as changing passwords to give one the ability to log in as another person, and to make changes to system settings and coding for different applications/modules”. In addition, 29 temporary employee user profiles had not been disabled upon their termination of employment. Administrative security for the GEMS system includes the authorizations of users and passwords for the GEMS application, election database and server, and to record and track user access to the GEMS server and the Microsoft operating system. Thus, the failure to follow these protocols has compromised the system.

166. Documents from the Shelby Board further show that its IT officials are insufficiently trained in the use of the GEMS software, and overly reliant on the ES & S vendor. For example, Boyce testified in 2010 that he was not familiar with various GEMS write-in votes tables, and ranked the then Administrator Holden as having low knowledge of the GEMS software system. Exb. “F”. Upon information and belief, ES & S is a privately owned limited liability company, owned by McCarthy Group LLC which is a privately owned investment firm managing over \$500 million in assets. The lack of appropriate independent review of the Shelby voting systems, software, tabulator, and voting machines, impermissibly abdicates the duty to protect the right to vote to the unchecked hands of private entities.

167. The records produced further show that the Shelby Board has used more than one database during an election, more than once, where serious problems have been reported. Emails

show that a second database was used for COR-09 voters in the August 2, 2012 election. The use of more than one database has been flagged by election experts as less secure. Exb. “F”.

168. Issues with votes in precinct COR-09 in 2012 were not new, as a lawsuit was filed in 2010 by several candidates where 5390 votes were affected when the May 2010 early vote database [instead of the August 2010 one] was uploaded by the Shelby County Election Commission prior to election day.⁵⁶ One election worker told the Tennessee Bureau of Investigation that another worker had told him that the problem was discovered in pre-election day testing, but not corrected before election day.⁵⁷ Staff member Boyce testified that “ES & S wrote the script”.⁵⁸ Precinct COR-09 again was identified in that lawsuit as having differing votes between the Statement of Votes Cast report for that precinct and the Participating Voter List, with audit logs showing four other locations having unexplained extra vote uploads on the day *prior* to the election.⁵⁹

169. In the October 2015 election, a second database was also used, with a reported communication break-down between the GEMS software and memory cartridges with the system not recognizing the cards as downloads. Exb. “F”.

170. Responses to open records requests by SAVE, and personal observations, further show an inadequate chain of custody of the memory cartridges from the precincts to the Zone Turn-in Sites. In response to open records requests for logs of the memory cartridges turned in at each site, an attorney for the Shelby Board responded via email of 1/21/14 that “they do not exist.

⁵⁶ Newman, et al v. Shelby County Election Commission, Shelby County Chancery Court, No. CH-10-1538 (2010).

⁵⁷ Office of the District Attorney General, “*Results of Investigation Into Use of Erroneous Voter Data By Shelby County Election Commission in August 5, 2010 Election*” Oct. 25, 2010, pg. 7.

⁵⁸ Newman. Et. al, v. Shelby County Election Commission, et. al, Shelby County Chancery Court, No. 10-1538, Transcript of Dennis Boyce Deposition Sept. 28, 2010, pg. 21:17-24, 22:1-7.

⁵⁹ However, the proof was not admitted by the Chancellor in the lawsuit due to a chain of custody issue related to the Plaintiffs’ expert.

There are no logs because the procedure is, as the cartridges are delivered, the precinct or zone is checked off on a list and the list is not kept”. Exb. “F”.

171. In November 2016, Dr. Weinberg personally observed the early voting removal of memory cartridges at the Shelby Board Annex offices, and the upload of the early vote cartridges into the AccuVote DREs for tabulation. From observation there appeared to be multiple opportunities for someone to trade out or upload a cartridge unnoticed. At the beginning only one worker plugged in the early vote machines in each row, cut the seals, opened the machines, turned them on and printed a tape. This was all done before the Election Day polls closed. Multiple election workers who were uploading the early vote memory cartridges walked in and out a door to the public outer office area near the machines that were being used to upload the memory cartridges to the server. Even the auditor walked away at one point. At least one study has reported that malware can be placed on a cartridge and if inserted into an AccuVote DRE could spread to infect the GEMS server.⁶⁰

172. The *Voting on Thin Ice* Report further found serious calibration problems reported for the Shelby AccuVote DREs. Dr. Weinberg documented the program to the Shelby Board in October 2015 (as well as again misassignment of voters). The Stockings had problems voting in August 2015, with Shirlene Stafford’s choice for City Council in her district not appearing on her ballot at the early vote location. Exb. “M “. Her husband, Ron Stocking, caught the error, was upset, and reported it. The poll worker tried to pull up the correct ballot with a memory card, and the incorrect ballot popped up again. Thereafter he voted provisionally, and later addressed the

⁶⁰ Univ. of California report, University of California report on Diebold Election Systems Incorporated voting system (Diebold GEMS 1.18.24/AccuVote) , pg. 12-13, 16; see also, “Electronic Voting System is Vulnerable to Tampering”, Headline@Hopkins Media Advisory, 8/1/03; *see also* www.verifiedvoting.org/resources/votingequipment/premier-diebold/accuvote-tsx/ (contends that TSx is susceptible to viruses transmitted through its memory card bank, and cautions to report broken seals because a person can install his own software on a TSx once gaining access to the machine).

Shelby County Election Commission about the problems at the request of Commissioner Norma Lester. Exb. “N” Even former Tennessee Attorney General Mike Cody reported that he had difficulty when trying to vote for Congressional candidate Steve Cohen in 2016, when it “defaulted or bounced up to the first person on the ballot”. Exb. “F”. And, Shelby Board Commissioner Lester wrote that “there remains[sic] numerous occasions when selecting Hillary the vote flips to Trump and when selecting Trump his is totally removed from the ballot. This is because he is first and there is no where else for him to go”. She adds “[t]hese machines have exceeded the life span of acceptably. Two years is the absolute longest we should have to wait. As taxpayers we deserve better and nothing is more important than the integrity of the election process.” Exb. “K”.

173. Problems have continued after the *Voting on Thin Ice* Report was completed. For example, at the August 20, 2018 Shelby Board meeting to certify the August 2018 elections, Memphis City Councilwoman Patrice Robinson testified to her own personnel observation that a voter at Bethel Grove Elementary school precinct had been provided the wrong ballot when she sought to vote on a Shelby AccuVote DRE, despite assurances by Defendant Linda Phillips that voters got the correct ballot. Video Testimony attached as Exb. “O”. They contacted the Defendant Shelby County Election Commission and was told it was corrected, but then when trying to vote again it was still incorrect. The voter and Councilwoman Robinson had to ask that the Defendant Shelby County Election Commission call again, and finally the ballot was corrected. She testified her concern that most voters do not complain, and wonders how many other people got the wrong ballot and did not know it. She and Defendant Lester asked that the Defendant Shelby County Election Commission investigate. Due to the complaints, Defendant Shelby County Commissioner Lester did not vote to certify due to voters being assigned the

wrong ballot, and expressed concerns that this has been an ongoing problem and that voters were not allowed to take a photograph to prove that that they did not receive the correct ballot. Exb.

“O”. Defendant Lester testified that some voters cast their ballots before they were aware that the wrong ballot had been assigned, thus disenfranchising them from voting in the correct districts.

174. A voter, Dell Gill, also testified at the August 20, 2018 Defendant Shelby County Election Commission about the failure of the Defendants to comply with state law . He was denied to poll watch at a poll. He further complained that the Defendants were not following the state law in that it was opening the early vote machines before the election day polls closed. The Defendant Administrator Phillips stated that Defendant Goins permitted the Defendants to begin processing early voting as soon as the polls open election day at 7am, which is contrary to state law and regulations. Exb. “O “.

175. On August 2, 2018, Veronique Black, a citizen residing at 3572 Claypool Avenue, Memphis TN, 38111, reports that she attempted to vote at 750 Cherry Road, Memphis TN 38117 (Botanic Gardens), at approximately 6:30pm. When trying to cast her vote for Democratic candidate Craig Fitzhugh, the voting machine two different times would instead show up on the AccuVote DRE as being cast for a Republican gubernatorial candidate. This happened more than three or four times with other candidates she selected as well, even though she attempted to correct the error and notified poll officials. When trying to file a complaint, she was given a number to call the next morning. She tried several times over the course of the week, but only a recording would answer saying that no one was available to take her call. Affidavit of Black attached as Exb. “P “.The process was a severe barrier to her casting her fundamental right to vote. Exb. “P “, No. 17.

176. Former Shelby County Election Commissioner Myra Stiles who was sent an incorrect absentee ballot in the November 2018 elections. She noticed when the ballot contained a candidate for state representative that was not in district 90 where she has resided for many years.

177. Selena McClure was denied her right to early vote in October 2018, when she was falsely accused of having already cast an absentee ballot. She was not even afforded an opportunity to cast a provisional ballot. The process was a severe barrier to her casting her fundamental right to vote. Exb. Q.

178. From the facts set forth above and herein, it is apparent that the problems with the Shelby County voting systems, including voting machines, software, tabulator(s), and election management systems, are pervasive, severe, chronic and persistent and will continue absent declaratory and injunctive relief. There is a systematic breakdown in the voting processes.

179. From the facts set forth above and herein, and the Secretary's own admissions, the voting irregularities from the Shelby AccuVote DRE's is more than just an isolated incident, and thus the pattern occurring over more than a decade affecting thousands of voters without redress shows a discriminatory purpose in that Shelby County has the largest population of African Americans in Tennessee, and they also discriminate on the plaintiffs and voters who reside in Shelby County, Tennessee based upon where they live.

180. Problems with the AccuVote DREs have been documented in another state as recently as the past fall. On September 18, 2018, the Fulton County Superior Court of Georgia ordered a new election for in a Georgia state legislative race where proof was presented that numerous

voters received the wrong ballot. The State of Georgia uses the same Diebold AccuVote DREs as in Shelby County, Tennessee.⁶¹

181. Even more alarming are the responses of the Shelby County Election Commission to the Plaintiff SAVE's most recent open records' request. Exbs. "R and "S". The August 26, 2018 response of the Defendant Shelby Administrator states that it has no documents in its possession as to the following requests: (1) persons having access to the tabulation server for the August 2, 2018 Shelby County Elections; (2) regarding the pre-election and post-election testing of the election computer at the Central Office [GEMS server] which received the tabulated votes from each election collection center zone [Zone Turn In Sites] for the August 2, 2018 Shelby County elections (including early vote), including checking for unauthorized software, unauthorized connection to the internet, hacking, and unauthorized editing of results; (3) regarding the chain of custody of the PCMCIA cards, ballots, poll books, election results cartridges for the Shelby County School Board District 9 election (including early vote); (4) regarding the access to the tabulator by the Election Systems & Software representative(s) from May 25, 2018 to August 6, 2018; (5) regarding any review of the software, tabulator, and/or voting machines used by Shelby County voters by independent expert(s), state, and/or federal official(s) and/or staff, since November 2016; (6) regarding any action taken in response to the *TACIR Trust But Verify* 2007 Staff Report, including documents that identify what person(s) put the editing software on the Shelby County Election Commission voting machines, as well as any investigation of the same, and the results of the investigation. Exbs. "R" and "S".

D. SAVE's Demand

⁶¹ *Curling, et al, v. Brian Kemp, et al*, No. 1:17-cv-02989-AT (N.D. GA, Atlanta Div.), Dk. #226, pg. 29, paragraph No. 59.

182. The Defendants State and Shelby Boards, Secretary, Tennessee Election Commission, Shelby County Election Commission, Coordinator of Elections, and Shelby Administrator are aware of the problems with the Shelby voting systems, including AccuVote DREs, machines and systems, as recently as July 9, 2018 when the SAVE members testified and presented the *Voting on Thin Ice* Report at the regular Tennessee Election Commission meeting asking that they be replaced.

183. At the aforesaid regular meeting, the Plaintiff SAVE members further brought to the Defendant State Board's attention that its minutes do not reflect that the Shelby County AccuVote DRE and GEMS v.1.18.24 were ever recertified. They asked that the current Shelby voting systems be replaced with paper ballots and an optical scan system; that the software, tabulator, and machines be examined and internally audited; as well as requesting the State Board to refer the *Voting on Thin Ice* Report to the Tennessee Attorney General, Comptroller, and Tennessee Bureau of Investigation for review and action.

184. At the aforesaid regular meeting, Mark Goins, the Coordinator of Elections for the State of Tennessee, stated that the SAVE members were correct that the minutes did not reflect that the Shelby GEMS 1.18.24 had ever been certified, but claimed there was a clerical error as to the initial certification. Goins, however, was completely unable to explain why the Shelby AccuVote DREs and GEMS 1.18.24 were not listed in the official State Board minutes as ever being recertified. Exb. "B". Certainly, if proper testing had been done on the Shelby County voting systems for recertification, they would not have passed, and recertification was not a reasonable nondiscriminatory choice.

185. At the meeting, Goins testified that a "peek" had been taken by the Tennessee

Comptroller in 2012 on the issues, but acknowledged that the office did not have the resources to do a forensic audit. What is unexplained by Goins, or any other state officials, is how the state law for recertification could have been complied with, if (1) the State and Shelby Board minutes do not reflect that the Shelby voting systems in use was recertified; and (2) neither the Coordinator of Elections (nor the Comptroller) has ever reexamined [internally or externally] the Shelby AccuVote DREs and GEMS 1.18.24, and tabulators (assuming they ever were examined in the first place). Clearly, any alleged recertification of the Shelby County system was arbitrary and capricious, based upon a mistaken view of the law and technology, or fraud.

186. Goins further admitted that the Shelby Board had not complied with state law to audit all tally [poll] tapes for many years, and had been only auditing a percentage of the tapes.

187. After discussion, the State Board Members declined to refer the matters set forth in the *Voting on Thin Ice* Report to the Tennessee Attorney General and Comptroller on a divided vote.

188. On September 30, 2018, the Plaintiffs SAVE faxed a demand letter to the Defendants Tennessee Secretary of State Tre Hargett, the State Board Members, the Coordinator of Elections, the Shelby Board Members, and the Shelby Administrator Linda Phillips asking, among other things, that the voting machines, software, and tabulators be inspected, and that they ask the U.S. Dept. of Homeland Security to provide a full cyber scan. Exb. “T”. 174. At the date of filing this Complaint only the Defendant Secretary and Goins have responded to the SAVE September 2018 demand, with a letter from the Coordinator of Elections.

Exb. “U”. In the October 4, 2018 letter, Goins states that the Shelby County Election Commission is responsible for “protecting the technology used to conduct elections from malicious actors who want to jeopardize the integrity of the election process”. Exb. “U”. While he states that the Shelby County Election Commission has been educated and trained on

cybersecurity and cyber-hygiene best practices, nowhere does he state whether or not any such best practices have been implemented, or that he is providing any oversight. Exb. "U".

189. In his October 4, 2018 letter, Goins denies the request for SAVE's expert to examine the Shelby voting systems, software, and tabulators. Exb. "U". He contends that the chairs of the political parties, independent candidates and the press are notified when the voting machines are inspected and tested. Exb. "U". However, such inspection does not allow the party leaders, independent candidates or press to examine the internal software for the voting machines, and tabulator(s).

190. In his October 4, 2018 letter, Goins states that candidates can photograph poll tapes posted on the election precinct door after voting ends, but nowhere states that they will have the opportunity to inspect the internal software for the voting machines and tabulator to ensure that the printed poll tapes accurately record a voter's ballot choices. Exb. "U".

190. In his October 4, 2018 letter, Goins states that the decision to purchase new voting equipment rests with the Shelby County Election Commission, even though the Secretary, Tennessee Election Commission and State Board are charged with certifying, recertifying and decertifying any voting systems and machines to be used in the State of Tennessee. Exb. "U".

191. The Defendants Secretary, Tennessee Election Commission, State Board Members, Coordinator of Elections, Shelby County Election Commission, Shelby Administrator, and Shelby Board Members have failed to examine the Shelby voting systems, including the AccuVote DREs and GEMS software, for certification and/or recertification with uniform testing criteria that complies with the Tennessee Election Code, and have refused proper requests for examination.

192. In the alternative, any alleged certification and/or recertification of the Shelby voting systems, including the AccuVote DREs and GEMS software, by the Defendants was arbitrary and capricious, and based upon a mistaken view of the law, or fraud, in that they do not meet state or federal standards, and they should be decertified.

D. Relevant Statistics and Facts Regarding Shelby County, and the State of Tennessee

193. The State of Tennessee is comprised of 95 counties. Two of said 95 counties are Shelby County and Hamilton County.

194. According to the 2010 U.S. Census, the population of Shelby County is 927,644. Of that population, the race of 40.60 percent is White, the race of 52.10 percent is Black, Hispanic is 5.60 percent, Asian is 2.30 percent, and others the balance.⁶²

195. The population of Hamilton County is 357,738. Of that population, the race of 71.3 percent is White and the race of 19.2 percent is Black, Hispanic 5.42 percent, Asian is 1.92 percent, and others the balance.

196. Shelby County has the largest population in Tennessee, and has the largest population whose race is Black (African American).

197. According to the Shelby County Election Commission as of September 2018, the registered voters in Shelby County have the following racial makeup⁶³:

	Black 161,903
	White 118,070
	Hispanic 1396
	Other 230,605
TOTAL	511,974

⁶² Shelby County Government website, “Demographics”.

⁶³ Shelby County Election Commission Website, “TN- Voter Registration Ward-Precinct Stat File Detail”, 9/4/18. ⁷⁰ Tennessee Secretary of State “Voting Systems by County”.

198. Hamilton County uses the Dominion Image Cast Optical Scan voting machines and election management systems, which has an Optical Scan Ballot system.⁷⁰

199. According to the Defendant Secretary, Hamilton County has 194,057 registered voters as of June 1, 2018.

200. Shelby County, Tennessee has the largest number of registered voters in the State of Tennessee, and the largest number of registered voters whose race is Black in the State of Tennessee.

201. No other county in the State of Tennessee uses the ES & S AccuVote TSX.⁶⁴

202. In July 2018, a Shelby County Chancellor issued an order for the Shelby County Election Commission to open more early voting sites and days earlier as a result of a lawsuit filed by the NAACP, after arguments that the plan to open only three sites in Germantown, East Memphis, and Whitehaven would have suppressed vote in predominately black neighborhoods.⁶⁵ The allegations of the lawsuit and the resultant relief granted supports the Plaintiffs claims of a discriminatory pattern and practice on the part of the Shelby County Election Commission.

203. In October, 2018, the Tennessee Black Voter Project filed a lawsuit when the Defendant Shelby County Election Commission rejected approximately half of the 36,000 voter registration applications received. The group sued to inspect the voter registration forms to see the basis for the huge number of rejected applications. *Tennessee Black Voter Project v. Shelby County Election Commission*, No. CH-18-1476.

204. In November 2018, John Barzizza filed a Complaint for Election Contest alleging that the Defendant Shelby County Election Commission failed to properly and appropriately receive,

⁶⁴ Tennessee Secretary of State, "Voting Systems by County".

⁶⁵ The Commercial Appeal, "Shelby County chancellor aims at early voting compromise with modified order", 7/9/18; NAACP, et. al, v. Shelby County Election Commission, No. CH-18-1003.

verify, permit, authorize, and disseminate absentee ballots to all voters who otherwise qualified to cast an absentee ballot, and further failed to appropriately tally and accept all validly cast and submitted absentee ballots. He further alleges that the Defendant failed to do the same for provisional ballots, and failed to properly administer the voting procedure set forth by law.

Barzizza v. Phillips, CH-18-1713-2.

VI. SPECIFIC ALLEGATIONS

A. Conduct of All Defendants—Past and Threatened.

205. Plaintiffs aver that Shelby County, Tennessee maintains a system for the conduct of elections in violation of the Fourteenth Amendment. The Constitutional violations in that system are persistent, systemic and severe.

206. For years, Defendants and their predecessors have recognized the need for massive systemic reform. Notwithstanding this recognition, Defendants and their predecessors have maintained Shelby County, Tennessee's inequitable and arbitrary system from election to election, without exercising adequate oversight, providing sufficient funding, or taking the remedial measures necessary to address pervasive and well-known deficiencies that have caused the disenfranchisement and severe burdens on the fundamental right to vote of Shelby County, Tennesseans and the Plaintiffs.

207. Defendants through their repeated administration of elections marked by massive breakdowns and failures to protect the right to vote, have violated and, absent remedial action by this Court will continue to violate, rights secured to the plaintiffs both by the Fourteenth Amendment and by applicable federal statutory law.

208. Defendant Tennessee Secretary of State has promulgated and promoted or failed to promulgate, through action and inaction, non-uniform and wholly inadequate standards and processes among the counties with respect to the voting systems and processes.

209. All Defendants, at all times material to this Complaint, knew that the antiquated Shelby voting systems, including the AccuVote DREs and GEMS software, do not, and can not meet Tennessee's statutory and regulatory requirements for recertification, equipment, safety, security, and accuracy. The voting machines and software were purchased at least 13 years ago. As set forth in the Center for American Progress Report:

Old voting machines pose serious security risks and are susceptible to system crashes, "vote-flipping" and hacking, as many rely on outdated computer operating systems that do not accommodate modern-cybersecurity protections. Moreover, upkeep for outdated machines is becoming increasingly difficult, because many parts are no longer manufactured. According to experts, the predicted lifespan for most voting machine models is around 10 years. Adding to this, experiments conducted by computer scientists on electronic voting machines have shown that they are easily hacked, can be reprogrammed to predetermine electoral outcomes, and are susceptible to malicious vote-stealing software. While more long-term solutions to fixing flaws in voting machine architecture may be required, one thing states can do right now to better protect against machine malfunction and Election Day disruptions is to invest in replacing all outdated voting machines. This would include switching to a paper ballot system with new optical scan machines.

210. Further, the Defendant Secretary of State, and other Defendants have failed altogether to enact any baseline standards to protect the Shelby County, Tennessee elections from hacking and machine malfunction. Tennessee was one of only five states given an "F" by the Center for American Politics in its "Election Security in All 50 States" review published in February 2018. As explained by Matthew Bernhard, a computer scientist who has conducted focused research on Diebold AccuVote voting system, of the type and version used by Shelby County, Tennessee, due to the lack of a VVPAT, if the system is not correctly recording votes, either in error or out

of malice, there is no way to tell. “Any assurance provided by the machine would be akin to a criminal insisting that he did not commit the crime—other evidence is needed to corroborate the claim”. *Affidavit of Matthew Bernhard*, Exb. V “”, No. 9.

211. As further explained by Bernhard:

DREs are essentially just regular computers, often running the same software as a commodity laptop. Like any regular computer, DREs are vulnerable to any kind of malicious exploitation, and in fact often more so as they typically run out-of-date software that lacks critical security patches. Exploitable vulnerabilities in DREs run the full gamut: buffer overflows in the vote recording software, privilege escalation bugs in the operating system, improper checksum verification by the bootloader, and architectural flaws such as improper use of voter authentication technologies are just a few examples at various levels of the DRE system. Using one of these exploitations, an attacker can make the DRE do just about anything. For example, my academic advisor made one such DRE, the Sequoia AVC Edge, run Pac-Man. There is nothing different about Shelby County’s voting system that would prevent a similar exploitation. This level of vulnerability makes it exceedingly possible for DREs to be infected with software that does not accurately record votes.

Exb. “V”, No. 11.

212. The “F” grade for Tennessee by the Center for American Progress was also based in part on the fact that post-election reviews are only done in counties using paper ballots.

213. The Defendants have treated Shelby County voters differently with regard to the right to recount procedures and election security. In those counties in Tennessee that utilize precinct based optical scanners, the local election commissions are required to conduct automatic mandatory audits of the voter-verified paper ballots cast for the U.S. President in a presidential election and the governor in a gubernatorial election. Tenn. Code ann. 2-20-101 & 103. This is not afforded to the plaintiffs who are voters in Shelby County, Tennessee.

214. In addition, the state law requires that the vendors of precinct-based optical scanners purchased must provide documentation and permit the Tennessee Election Commission or Tennessee Secretary of State to have the systems and scanners reviewed by an independent

expert, selected by the state election commission or secretary of state “to ensure the functionality and security of the systems”. Tenn. Code Ann. 2-20-104 (a) (B). There is no such state law requirement for independent expert review of the voting systems used in Shelby County, Tennessee to ensure the functionality and security of the systems used by the plaintiffs.

215. Further the state law requires that vendors of precinct-based optical scanners purchased pursuant to the chapter shall provide “access to all information required by law, rule or regulation” to be placed in escrow by an agent designated by the secretary of state. Tenn. Code Ann. 2-20-104(c). This provision authorizes review of the proprietary source code of the software used in those voting machines, and provides an escrow agent. There is no such state law provision for the voting systems used in Shelby County, Tennessee, thus leaving the security of the software provided by the vendor unchecked. As explained by Bernhard, “since DREs are not made available for public auditing, there is no way to determine if their software has been modified in anyway”. Exb. “V “, No. 12.

216. And, the state law prohibits the use of any precinct-based optical scanner that has “any capacity, enabled or disabled, for wireless communication of any sort”. Tenn. Code ann. 2-20-104 (d). There are no such provisions for the voting apparatus and machines used in Shelby County, Tennessee. And, as set forth in the *Voting on Thin Ice Report*, the Accuvote TSX voting machines have modems, and are even used at satellite locations to remotely transfer memory card votes on election day to the tabulator at the Shelby County Election Commission Operations Center. Thus, the plaintiffs are not afforded adequate and uniform standards in their county to protect against wireless communication and tabulation, which opens the system up to hacking by unscrupulous persons near, or afar, including enemies of the United States.

217. In addition, all optical scan machines are tested for logic and accuracy prior to an election, while the electronic voting machines used only in a number of precincts are required to be tested pre-election elsewhere in the State. And, the timing of such testing, and whether the public may attend is not mandated for non-optical precinct scan counties.

218. The Defendants have further failed to implement any rules or procedures for the handling of memory cards at the satellite zones. As the Center for America Progress reports, Tennessee has no statutorily mandated review process to ensure that all voting machine memory cards have been properly loaded onto the tally server. This lack of a uniform standard adversely affects Shelby County in that other counties have mandatory audits, and paper trails to verify that all votes cast are counted.

219. And, Bernhard opines that cards can be easily produced that would let anyone vote as many times as they like in an election. Exb. “V “, No. 14. He further explains that the lock on the AccuVote TS machines that are to protect the memory cards and power buttons can be easily picked in 10 seconds, or a with a key purchased online. Exb. “V “, No. 15. And, seals to secure the voting machines may be purchased on Amazon, which makes it easy to cover up illegal access. Exb. “V “, No. 17. With these vulnerabilities not addressed by the Defendants, Bernhard opines that undetectable vote-stealing software can be installed in a matter of minutes that could spread to every other machine in Shelby County. Exb. “V “, No. 19. Thus, he states that “due to the architectural flaws of the system, and failures in operational security at many levels, it is not possible for any person to faithfully attest that any voting machine in Shelby County is free from malware that could affect election results. Exb. “V “, No. 20.

220. All Defendants, at all times material to the Complaint, knew or should have known of numerous expert opinions and academic research identifying security vulnerabilities in

AccuVote DREs and advising against the use of AccuVote DREs in public elections because of their demonstrable lack of safety, reliability, and trustworthiness.

221. All Defendants, at all times material to this Complaint, knew or should have known that they were incapable of confirming the integrity of the Shelby voting systems, including the improperly modified GEMS 1.18.24 and AccuVote DREs, and incapable of certifying that election results produced by the same are correct, given that malicious manipulations may be generally undetectable, in part because of the inferior engineering of the system.

222. By choosing to move forward and continue to use the Shelby voting systems to conduct the November 2016 general election, and the August and November 2018 elections, all Defendants caused the Plaintiffs to cast votes on an illegal and unreliable system that must be presumed to be compromised and that is incapable of producing verifiable results. As Bernhard opines, based upon his reading of the plaintiff's complaint and the *Voting on Thin Ice Report*, "there seems to be circumstantial evidence that election tampering may have occurred". Exb. "V ", No. 22. He adds that the errors reported in the complaint and VTI Report "are consistent with the kinds of errors I would expect to see generated by malware, programming errors, or other sources of computer system malfunction. ". Exb. "V ", No. 25. Yet, no action has been taken by the Defendants to properly investigate, or secure the vote.

223. Besides the DRE voting machines, the Express Poll Books units used in Shelby County have similar architectural flaws to their security model, lack sufficient cryptography to protect voter data or to prevent malicious tampering. Affidavit of Bernhard, Exb. "V ", No. 26. As a result, the antiquated poll books malfunctioned resulting in long voting lines in October 2018. Exb. "V ", No. 27. The voter data in the ExpressPoll ebook can be "changed at will, either maliciously or by accident, with no record of having occurred", Exb. "V ", No. 29. As an

example of the lack of security protocols by the Defendants, one of Shelby County's ExpressPoll units was highlighted at the DEFCON Voting Village in 2017, where full voting information for over 650,000 Shelby County voters was discovered on the book. Exb. "V", No. 28.

224. Defendants' actions have harmed Plaintiffs by creating a fundamentally unfair system of voting in violation of the *Fourteenth Amendment's* Due Process Clause, and have impaired the ability of Shelby County citizens to participate in state elections on an equal basis with other qualified voters.

225. Defendants' actions have *specifically* and individually harmed Plaintiffs by diluting their votes and thereby denying them the right to vote in violation of the Equal Protection Clause of the *Fourteenth Amendment*.

B. Standing

226. Plaintiff SAVE has organizational standing, on its own behalf, to bring each of the claims for prospective relief stated in this Complaint because SAVE has been and will be directly harmed by the diversion of resources from its purposes of research and education in order to bring, fund, and participate in this litigation.

227. Plaintiff SAVE also has organizational standing, on behalf of SAVE's individual Tennessee members threatened with imminent injury-in-fact, to bring each of the claims for prospective relief stated in the Complaint because: (1) at least one of SAVE's members would have standing to sue each Defendant on each claim in his or her own right; (2) the interests SAVE seeks to protect are germane to SAVE's organizational purpose described above; and (3) the prospective injunctive and declaratory relief requested does not require the participation of SAVE's individual members in this lawsuit.

228. At all times, Plaintiff SAVE's membership has included at least one eligible voter of the

State of Tennessee who is a resident of Shelby County, Tennessee.

229. The Individual Plaintiffs have standing because each of them suffered concrete and particularized harms, and are now threatened with imminent additional injury-in-fact as a result of Defendants' prior and intended future unconstitutional continued use of the Shelby voting systems, including the AccuVote DREs and the improperly modified and outdated GEMS software, along with the failure to properly inspect, audit, train, secure, monitor, protect, upgrade, provide adequate security patches, and program the GEMS software and AccuVote DREs.

Past Injury

230. The Individual Plaintiffs voted by DRE in many of the the last several elections for which they were eligible, as recently as the Shelby August 2018 elections. Said plaintiffs were deprived of their right to vote in a verifiable, reliable election conducted in a manner that ensured that his or her vote would be counted accurately. The Individual Plaintiffs do not know if the machines they voted on in past elections recognized and properly recorded their votes.

231. All of the above Plaintiff SAVE members and Individual Plaintiffs were injured by being required to vote in an election conducted using antiquated Shelby voting systems, including the AccuVote DREs and GEMS 1.18.24 improperly modified and outdated software, which deprived them of their right to participate in a trustworthy and verifiable election process that safely, accurately, and reliably records and counts all votes cast and that produces a reliable election result capable of being verified as true in a recount or election contest.

All of the foregoing Plaintiff SAVE members and Individual Plaintiffs were additionally injured by being required by Defendants to cast votes on antiquated Shelby AccuVote DREs—and thereby to suffer violations of their constitutional rights.

Imminent Future Injury

232. Each of Plaintiff SAVE's members, and the Individual Plaintiffs intend to vote in the October 2019 elections, and thereafter in Shelby County, Tennessee.

233. If the relief requested is not granted, each of SAVE's members, and the Individual Plaintiffs will be required to cast their votes in the October 2019 election using Shelby's antiquated voting systems, including the AccuVote DREs and GEMS improperly modified and outdated software.

234. Each of Plaintiff SAVE's members, and the Individual Plaintiffs, voting in the October 2019 and subsequent elections, will be irreparably injured, among other things, by suffering burdens and infringements on the fundamental right to vote caused by having to use Shelby voting systems that cannot be relied upon for a trustworthy and verifiable election result. The SAVE members and Individual Plaintiffs want to cast their vote in the October 2019, and future elections that is properly counted. Due to the deficiencies in the Shelby County voting system and processes, it is inevitable that mistakes have taken place and will continue if not addressed.

235. None of Plaintiff SAVE's members, or the Individual Plaintiffs, can be adequately compensated for these harms in an action at law for money damages brought after the fact because the violation of constitutional rights is an irreparable injury.

236;. A favorable decision by this Court and the ordering of the relief requested by the Plaintiffs in this Amended Complaint is likely to redress their injuries.

C. Efficacy of Relief Requested.

237. There is ample time for the Defendants to remedy the fundamentally unfair voting system in Shelby County, Tennessee before the October 2019 elections. Exb. V, No. 2. The State of Virginia decertified its remaining DRE voting machines in September of 2017, prior to the

November elections. Exb. “V “, No. 3. The State of Maryland decertified its DRE machines in February of 2016 just ahead of the April primaries. Exb. “V “, No. 4.

238. New threats have been brought to light, that were not present only a few years ago. 2016 was the first year that Advanced Persistent Threats (APTs) appeared as a threat to U.S. Elections, and the Office of the Director of National Intelligence (ODNI), Department of Justice, Federal Bureau of Investigations, and Department of Homeland Security expressed concern that APTs will continue to be a threat in U.S. elections through 2020. Exb. V, No. 5. As explained by Bernhard, such APTs often try to penetrate critical infrastructure systems in order to gain access, gather intelligence, and garner the ability to create damage at a later selected time. Exb. V, No. 2. The U.S. Department of Homeland Security has detailed activities from the North Korean government to target critical infrastructure sectors in the U.S. and globally. Exb. V, No. 2.

239. APTs were able to successfully infiltrate VR Systems, a U.S. election company, and target several others. Exb. V, No. 3. Given Bernhard’s knowledge and study of cybersecurity as it pertains to voting systems, it is extremely likely that APTs are trying to gain access and manipulate election systems. Given the level of vulnerability present in Shelby County’s voting system, Bernhard’s expert opinion is that it is a near certainty that if an APT has tried to gain access, it has succeeded. Exb. V, No. 4.

240. Bernhard further references that hacking activity meant to discredit Tennessee elections has already occurred in 2018 where Knox county experienced a distributed denial of service (DDoS) attack, distracting from the fact that hackers were infiltrating their election system and injecting malicious code into the system. Exb. V, No. 6.

241. The technologies at use in Shelby County, Tennessee for voting systems are less reliable and accurate than those used in other counties, due to their lack of VVPAT, and are antiquated as

admitted by the Defendant Administrator Phillips. The irrational variation in voting technology violates the Plaintiffs equal protection.

242. In addition, there is more than a reasonable inference of wrongdoing and misconduct, in that the prior Administrator of Elections, Richard Holden, was suspended and placed on probation in 2012; early vote poll tapes and certificates from the August 2012 elections are inexplicably missing; there has been a pattern of the Defendant Shelby County Election Commission authorizing the uploading more memory cards than voting machines assigned to the precinct (with the capacity to carry thousands of votes), and not all memory cards in at least three elections; and Matthew Bernhard opines that the allegations set forth in the complaint and *Voting on Thin Ice Report* are consistent with malware. Exb. V, No. 25.

243. The pattern of systematic disqualification of thousands of voters by uploading wrong databases, misassigning voters to the wrong districts that induce voters to miscast their votes, failure to process timely submitted voter registration forms, discriminating amongst African American voters as to the location of early vote sites, and other irregularities documented in this complaint and its attachments which have impacted on thousands of voters show an intent to violate the constitutional rights of the Plaintiffs, deprive them of their right to vote, as part of a pattern that erodes the democratic process.

244. The Plaintiffs have demanded action from federal and state officials and law enforcement repeatedly, including appearing before the Defendant Tennessee Election Commission in June 2018, to no avail. The entire election process, including the state's administrative and judicial corrective process has failed on its face to afford fundamental fairness.

245. The Tennessee state legislature has failed to act, notably amending the Tennessee Voter Confidence Act in 2011 to make the use of optical scan voting machines with a VVPAT

optional. The State provided safeguards for voters who secured those voting machines, but did not provide sufficient funding for the citizens of Shelby County to secure those more secure voting systems, and abdicated its responsibility to ensure the purity of ballot as required under the U.S and Tennessee Constitutions. And, in 2018, the Tennessee State legislature failed to pass legislation proposed to address the disparities and constitutional deprivations. This was not a reasonable or neutral choice.

246. In the absence of action by the Defendants, the state courts, the State Comptroller, the Governor, the FBI, the U.S. Department of Justice, the U.S. Congress, and others, this Court has wide latitude to fashion appropriate injunctive relief and should not stand mute in the face of the serious impairment of federal rights. Confidence in the integrity of our electoral processes is essential to the functioning of our participatory democracy. At stake is the fundamental political right to vote which we recognize as preservative of all rights. Where the election process reaches the point of patent and fundamental unfairness, any infringement must be carefully and mechanically scrutinized, with an obligation to afford prospective relief.. A state may not place an onerous burden on voters exercise of their right to vote. Because this Court has the power to protect the voters' constitutional rights, the Plaintiffs are asking for prospective relief. The Plaintiffs deserve voting apparatus, systems and processes that are accurate and trustworthy. Our democracy demands no less.

VII. CLAIMS

COUNT I: FUNDAMENTAL RIGHT TO VOTE

42 U.S.C. 1983

247. Plaintiffs incorporate and reallege each of the foregoing paragraphs 1- 246 above.

248. The right of all eligible citizens to vote in public elections is a fundamental right of individuals that is protected by the United States Constitution and incorporated against the States by the Due Process Clause of the *Fourteenth Amendment*. See *League of Women Voters v. Brunner*, 548 F. 3d 463 (6th Cir. 2008).

247. Inherent in individuals' fundamental right to vote is the right to participate in a trustworthy and verifiable election process that safely, accurately, and reliably records and counts all votes cast and that produces a reliable election result capable of being verified as true in a recount or election contest.

248. The Due Process Clause is implicated, and 42 U.S.C. 1983 relief is appropriate in the exceptional case where the state's voting system is fundamentally unfair. See *League of Women Voters v. Brunner*, 548 F. 3d 463 (6th Cir. 2008).

249. The voting systems in Memphis and Shelby County, Tennessee elections suffer from non-uniform standards, processes, and rules, and employs untrained or improperly trained personnel, and that has wholly inadequate systems, and procedures, all with a knowing, deliberate indifference, and/or willful blindness to the ongoing deprivations of the constitutional rights of the citizens. These deficiencies deny the Plaintiffs the fundamental right to vote in violation of the Due Process Clauses. The willful conduct further undermines the organic processes by which candidates are elected, including the upcoming candidacies of Plaintiff Towns, Jr. and Thornton.

250. The Defendants' election process has further impaired the Plaintiffs' ability to participate in state elections (and even national elections) on an equal basis with other qualified voters. Having once granted the citizens the right to vote on equal terms, the Defendants have arbitrarily valued one person's vote over another based upon where they live.

251. The problems with the Shelby voting systems, as acknowledged by the Defendant Tennessee Secretary of State, date back at least a decade and are pervasive, severe, chronic, and persistent. In addition, new cybersecurity threats have been identified which have resulted in the U.S. Department of Homeland Security identifying the nation's voting systems as critical infrastructure, and which have not been adequately addressed by the Defendants.

252. Defendants, acting under color of state law, are maintaining an election process in Shelby County that is permeated with broad-gauged, patent, and fundamental unfairness that denies and severely burdens the fundamental right to vote and violates substantive Due Process under the Fourteenth Amendment to the U.S. Constitution.

253. Defendants, acting under color of state law, are administering an election process in Shelby County that deprives eligible Shelby County citizens, including individual plaintiffs here, of their liberty interest in voting and does so without adequate pre-or post-deprivation process. The Shelby County election process fails to provide sufficient and meaningful notice of actions and decisions affecting registration status, casting, and counting of ballots and fails to provide adequate or timely process for Shelby County citizens to challenge such actions and decisions. The failure creates an unreasonably high risk that Plaintiffs and others will be erroneously denied the right to vote. The lack of an adequate process of notification and problem resolution has frustrated the purposes of the SAVE Plaintiff in ensuring that registered voters are able to register to vote, cast a ballot, and have their vote counted, and violates Due Process under the Fourteenth Amendment to the U.S Constitution.

254. By requiring the Plaintiff SAVE members, and Individual Plaintiffs, to vote using the antiquated Shelby voting systems, including the Shelby AccuVote DREs and the GEMS software, in the upcoming October 2019, and subsequent elections, the Defendants will

knowingly burden severely and infringe upon the fundamental right to vote of the Plaintiff SAVE Member Plaintiffs, and Individual Plaintiffs, and will also injure Plaintiff SAVE by causing it to divert resources, time, and personnel from other projects to bring this lawsuit.

255. These severe burdens and infringements caused by Defendants' conduct will violate the fundamental right to vote of the Plaintiffs.

256. These severe burdens and infringements caused by Defendants' conduct are not outweighed or justified by, and are not necessary to promote any substantial or compelling state interest that cannot be accomplished by other, less restrictive means.

257. Requiring voters to suffer these severe burdens and infringements upon their constitutional right to vote as a condition of being able to enjoy the benefits and conveniences of being permitted to cast their ballots in person at the polls violates the unconstitutional conditions doctrine.

258. The foregoing violations will occur as a consequence of the Defendants Hargett, the State Board & Members, the Coordinator of Elections, the Shelby Board Administrator, and the Shelby Board & Members acting under color of state law. Accordingly, Plaintiff SAVE and the Individual Plaintiffs bring this cause of action for prospective equitable relief against the Defendants pursuant to 42 U.S. C. 1983.

259. Unless the Defendants are enjoined and mandamus ordered by this Court, then the Plaintiffs will have no adequate legal, administrative, or other remedy by which to prevent or minimize the irreparable, imminent injury that is threatened by Defendants' intended conduct. Accordingly injunctive relief and prospective relief against these Defendants is warranted.

260. The Court may also order other safeguards to provide a more secure vote, such as requiring DHS Homeland Security cybersecurity scans, inspection of the Shelby voting systems,

machines, software, and tabulators by an Independent Master and/or the Plaintiffs' expert, and the other relief requested in the prayer.

260. The Shelby Administrator previously publically announced that the Shelby County Election Commission was reviewing purchasing new voting machines and systems, with the possible implementation of 50% by the October 2019 municipal elections. This piecemeal approach would arbitrarily immediately deprive 50 % of the voters to equal opportunity for a fair ballot if required to still vote on the AccuVote DREs. And, the Shelby County Election Commission website still states as of January 11, 2019, that the Commission is not planning to replace them until 2021.⁶⁶ Exb. W “.

261. Shelby Administrator Linda Phillips testified at the July 9, 2018 State Board meeting that the Shelby County Election Commission and Board Members hoped to have new voting machines and systems by the 2020 Presidential election. However, she also said that the Shelby Board was looking at a “hybrid” touchscreen system where a voter could review their ballot on paper created by a digital touchscreen. The system she referenced is not as secure as having the voter hand mark choices on a paper ballot and then having that optically scanned by a machine. Nor, does it comply with Tenn. Code Ann. 2-20-106 that “every effort shall be made to purchase United States manufactured precinct-based optical scan voting systems”.

262. The reason for a delay to 2020 or 2021 to purchase new voting technology and equipment is further unexplained, in that Shelby Administrator Phillips also testified to the State Board in July 2018 that Shelby County had allocated the funds for the new voting system and machines, and further that the county finance chair was not opposed to incurring debt to purchase a new voting system.

⁶⁶ www.shelbyvote.com.

263. The Shelby Board has announced in the past that it was considering purchasing new voting machines, as far back as 2013⁶⁷, but to date the same voting systems are in place that it purchased in 2006.

264. The failure of the Defendants Secretary, Tennessee Election Commission, State Board Members, Coordinator of Elections, Shelby County Election Commission, Shelby Board Administrator and Shelby Board to properly examine the Shelby voting systems for certification, recertification; their improper certification and/or recertification of the Shelby voting systems; and/or failure to examine in order to decertify the Shelby Voting systems, including the AccuVote DREs and improperly modified and outdated GEMS 1.18.24 software was not reasonable or neutral, was arbitrary and capricious, and prevents the voters from knowing if current electronic voting machines will accurately count their votes.

265. The *Voting on Thin Ice* Report accurately documents the failure of these Defendants to properly audit the votes, failure to provide functional voting machines, and repeated failures to provide the correct ballot so that a citizen can vote in the district(s) where he or she resides. This has directly injured the Plaintiffs, such as Michael Kernell in his August 2018 campaign for School Board Commissioner.

266. The Defendants' actions and inactions have cheapened, devalued, and diluted the votes of the Plaintiffs, including imposing barriers and hindering the ability or opportunity to vote.

267. Defendants' deprivation of Plaintiffs' constitutional rights under color of state law violates 42 U.S.C. 1983.

268. Plaintiffs have no adequate remedy at law to redress the wrongs alleged herein, which will cause them irreparable harm.

⁶⁷ *The Commercial Appeal* "Election Commission Looking at Problems" Jan. 20, 2013.

269. Accordingly, Plaintiffs are entitled to declaratory and injunctive relief as requested in this Complaint and the Prayer for Relief.

270. Plaintiffs respectfully request that this Court permanently enjoin the Defendants from requiring Shelby County voters to vote using the Shelby voting systems, including the AccuVote DREs and GEMS 1.18.24, after December 2018; and grant such other relief as may be warranted and as set forth in the prayer for relief.

COUNT II: EQUAL PROTECTION

42 U.S.C. 1983

271. Plaintiffs incorporate and reallege each of the foregoing paragraphs 1 through 246.

272. The Equal Protection Clause of the *Fourteenth Amendment* to the United States Constitution guarantees qualified voters a substantive right to participate equally with other qualified voters in the electoral process. This equal right to vote applies as well to the manner of its exercise. *See Hunter v. Hamilton County Bd. of Education*, 635 F. 2d. 219, 234 (6th Cir. 2011). A state may not arbitrarily impose disparate treatment on similarly situated voters.

273. All Plaintiff Members, and Individual Plaintiffs have the right to have their vote counted in a reliable and secure manner on the same basis as citizens and residents of Tennessee's other 94 counties.

274. Defendants, acting under color of state law, have maintained an unequal system of voting that lacks uniform standards, procedures, processes, and failed to ensure adequate resources, such that severely burdens and denies equal access to the right to vote, and results in arbitrary and disparate treatment of voters in Shelby County, Tennessee based upon where they live, as compared to other counties in the State.

275. As a result, Shelby County citizens eligible and desiring to vote do not have equal access to the franchise nor is each legitimate vote counted equally.

276. Defendants, acting under color of state law, have maintained an unequal system of voting that lacks uniform standards, processes and resources, severely burdens and denies equal access to the right to vote, and results in arbitrary and disparate treatment of African American voters in Shelby County, Tennessee.

277. By requiring the Member Plaintiffs, and Individual Plaintiffs to vote using the antiquated Shelby voting systems, including the AccuVote DREs and the improperly modified and antiquated GEMS 1.18.24 software, in any future election, including October 2019, August 2020, and November 2020, and elections thereafter, the Defendants will knowingly treat the Plaintiffs differently than other similarly situated voters in the same election who reside in Tennessee counties that do not use the Shelby voting systems, including DREs, as part of their voting systems, such as Hamilton County.

278. By requiring the Member Plaintiffs and Individual Plaintiffs, to vote using antiquated AccuVote DREs in elections after November 2018, but other voters in Shelby County to use newly purchased more secure voting machines proposed to be purchased, Defendants will knowingly treat those Plaintiffs who vote by AccuVote DREs differently than other similarly situated voters in the same election who reside in Shelby County.

279. Shelby County has the largest number percentage of residents in Tennessee whose race is Black. The Tennessee counties who use voting systems that provide a VVPAT have substantially less black voters than Shelby County. The use of the antiquated Shelby voting systems, including the AccuVote DRE machines and improperly modified and outdated GEMS 1.18.24 software, in

Shelby County has a disproportionate impact on Black voters in the State of Tennessee. Thus, use of the AccuVote DRE machines disenfranchises voters whose race is Black.

280. Because of these differential treatments, Plaintiffs who vote by DRE in Shelby County will suffer greater and more severe burdens and infringements on their underlying substantive rights—namely the fundamental right to vote, the right to freedom of speech and association, than will other similarly situated voters in Tennessee counties that do not use the Shelby voting systems, AccuVote DREs and improperly modified and outdated GEMs software as part of their voting systems.

281. These severe burdens and infringements that Defendants will impose unequally on the Plaintiffs who vote by DRE will violate the Equal Protection Clause of the *Fourteenth Amendment*.

282. By reason of the foregoing, the Defendants acting under color of state law, have deprived and severely burdened and threaten to continue to deprive and severely burden Plaintiffs of their fundamental right to vote and equal protection under the law secured to them by the U.S. Constitution, federal law, and Tennessee Constitution by requiring them to vote on the Shelby voting systems which citizens in other counties vote on VVPAT and precinct based optical-scan systems.

283. The current unequal system of voting in Shelby County, Tennessee caused by Defendants' conduct is not outweighed or justified by, and is not necessary to promote, any substantial or compelling state interest that cannot be accomplished by other, less restrictive means, lacks any substantial relationship to any important state interest, and is not rationally related to any legitimate state interest.

284. Requiring voters to be deprived of their constitutional right to equal protection of the laws as a condition of being able to enjoy the benefits and conveniences of voting in person at the polls violates the unconstitutional conditions doctrine.

285. The foregoing deprivations of Plaintiffs' constitutional rights by the Defendants' acting under color of state law violates 42 U.S.C. 1983.

286. The Plaintiffs have no adequate remedy at law to redress the wrongs alleged herein which will cause them irreparable harm.

287. Accordingly, the Plaintiffs bring this cause of action for prospective equitable relief, declaratory judgment, injunctive relief and mandamus against the Defendants pursuant to 42 U.S.C. 1983.

288. Unless the Defendants are enjoined by this Court, then the Plaintiffs will have no adequate legal, administrative, or other remedy by which to prevent or minimize the irreparable, imminent injury that is threatened by Defendants' intended conduct. Accordingly, injunctive relief and prospective relief against these Defendants is warranted.

289. Plaintiffs respectfully request that this Court permanently enjoin the Defendants from requiring Shelby voters to vote using the Shelby voting systems, including the AccuVote DREs and GEMS 1.18.24 software, after November 2018; and grant such other relief emergency temporary and preliminary injunctive relief, as may be warranted as set forth in the prayer for relief.

COUNT III

DECLARATORY JUDGMENT AND INJUNCTIVE RELIEF

290. The Plaintiffs incorporate and reallege each of the foregoing paragraphs 1 through 246.

291. Under 28 USC 2201(a), this Court may enter a Declaratory Judgment.

292. This Court has supplemental jurisdiction under Tenn. Code Ann. 29-14-113 to enter a Declaratory Judgment.

293. Plaintiffs have been disenfranchised or otherwise severely burdened in their right to vote as a direct and proximate result of Defendants' actions and inactions in maintaining Shelby County, Tennessee's constitutionally defective voting system. Plaintiffs reasonably anticipate that, absent injunctive relief, they may be disenfranchised or severely burdened in the exercise of their fundamental right to vote in the future. Defendants' conduct also has a chilling effect on the future exercise of the fundamental right to vote.

294. There exists an actual and justiciable controversy as to which the Plaintiffs require a declaration of their rights.

295. Unless the requested injunctive relief issues, the Constitutional and statutory rights of Plaintiffs will continue to be infringed.

296. Plaintiffs have no adequate remedy at law for Defendants' violations of their rights.

297. Plaintiffs seek an injunction prohibiting the use of the Shelby voting systems, including the AccuVote DRE machines and improperly modified and outdated GEMS 1.18.24 software, in Shelby County, Tennessee for all public elections from December 2018 forward, and that the Court declare the Shelby voting system currently in place unconstitutional under the *Fourteenth Amendment* to the U.S. Constitution and fundamentally unfair.

298. Likewise the Plaintiffs ask that the Court declare the Shelby voting systems currently in place unconstitutional under the Tennessee Constitution, Articles 1, Sec. 1; 1, Sec. 5; 1, Sec. 19, and IV, Sec. 1.

299. The Plaintiffs ask that the Court declare that the Defendants have failed to ensure that the freedom and purity of the ballot is safeguarded as required in the State of Tennessee.

300. The Plaintiffs ask that the Court declare that the Defendants have failed to insure that the Shelby voting systems ensure that the total votes cast reflect the will of the majority of the participating voters as required in the State of Tennessee.

301. The Plaintiffs ask that the Court declare that the Defendants have failed to ensure that uniform procedures are in place for the elections as required by the State of Tennessee.

302. The Plaintiffs ask that the Court declare that the Defendants have certified and/or allowed the use of electronic computers for tabulation of election results in Shelby County which are not programmed to accurately report votes, contrary to the Tennessee Constitution, laws and state rules.

303. The Plaintiffs ask that the Court declare that the Defendants have failed to examine and/or reexamine the Shelby tabulators, election management system, voting machines, software, and equipment as required by state law and rules.

304. The Plaintiffs ask that the Court declare the systemic problems in election administration at the Shelby County Election Commission and the Shelby voting systems violates the rights under the Tennessee Constitution of each Shelby County voter to have their votes accurately and reliably counted.

COUNT IV

MANDAMUS

305. The Plaintiffs reallege each of the foregoing paragraphs 1 through 246.

306. The Defendants have violated the Tennessee Election Code and Tennessee Constitution by using inadequate examination procedures in using and/or certifying AccuVote DREs that (1)

are not reliable or consistent in the recording and counting of votes; (2) are not secure; (3) do not provide a means for voters to verify that the voting machine properly recorded or counted their votes; and (4) do not provide a means for anyone to determine the actual votes cast in an election 307.

The Plaintiffs seek an order of mandamus compelling the Defendants to decertify and discontinue use of the antiquated Shelby voting systems, including the AccuVote DRE machines, and improperly modified and outdated GEMS 1.18.24 software, used in Shelby County, Tennessee; to establish uniform testing criteria that comply with the Tennessee Election Code; and/or to reexamine the Shelby voting systems, and grant the other relief requested in the prayer for relief.

PRAYER FOR RELIEF

1. That proper process issue and be served upon the Defendants, requiring the Defendants to answer this Complaint within the time required by law.
2. That this Court enter judgment declaring that Shelby County's voting system violates Plaintiffs' right to Equal Protection under the Fourteenth Amendment to the U.S. Constitution.
3. That this Court enter judgment declaring that Shelby County's voting system violates Plaintiffs' substantive Due Process rights under the Fourteenth Amendment to the U.S. Constitution.
4. That this Court enter judgment declaring that Shelby County's voting system violates Plaintiffs' procedural Due Process rights under the Fourteenth Amendment to the U.S. Constitution.

5. Preliminarily and permanently enjoining Defendants prior to future elections, including, but not limited to, the October 2019, and August and November 2020 elections:
 - a. To promulgate, adopt, and enforce uniform standards and processes to ensure the that passwords are protected in the Shelby County voting systems;
 - b. To promulgate, adopt, and enforce uniform standards and processes to ensure that insecure, antiquated, and malfunctioning voting machines, poll books, tabulators and voting systems are not utilized in Shelby County, Tennessee.
 - c. Prohibiting Defendants from conducting or authorizing the conduct of any public election in Shelby County, Tennessee without requiring subordinate election officials to permit, meaningful public observation of all stages of election processing, including observation of the tabulators and handling of memory cartridges at the satellite Zone Turn-In sites.
 - d. To promulgate, adopt, and enforce uniform standards and processes for the post-election audits that test the accuracy of election outcomes to confirm that ballots are cast as the voter intended and counted as cast.
 - e. To promulgate, adopt, and enforce uniform standards and processes to require pre-election testing for all voting machines in the State, including notification and permission of the public to attend.
 - f. To promulgate, adopt, and enforce uniform standards and processes to require reconciliation of the number of voters who enter a polling place with the number of ballots cast.
 - g. To promulgate, adopt, and enforce uniform standards and processes to post vote tallies and any reconciliation information publically.

- h. To promulgate, adopt, and enforce uniform standards on the handling of voting machines, poll books and apparatus when removed from use, including a requirement that voting systems are not used beyond their life expectancy.
 - i. To promulgate, adopt, and enforce uniform standards for cybersecurity protections of the voting systems in Tennessee.
- 6. Enter an Order directing the Defendants replace **all** Shelby County voting machines, election management systems, tabulators, and software before the October 2019 elections conducted by the Shelby Board, and replace the same with at least an optical scan system with hand marked paper ballots, or a sole paper ballot system;
- 7. Enter a preliminary and permanent injunction prohibiting Defendants from requiring Shelby County, Tennessee voters to vote using the antiquated Shelby County voting systems, including the AccuVote DREs, and improperly modified and outdated GEMS 1.18.24 software effective in elections in October 2019; August and November 2018, and thereafter.
- 8. Enter an Order that the Defendants jointly permit the U.S. Department of Homeland Security to perform all cyber hygiene scans, risk and vulnerability assessments, and other offered services with regard to the security of the Shelby voting systems (and tabulators), including following all resultant best practice recommendations before voting begins in Shelby County for the October 2019 elections, and report to the Court on the same.
- 9. Enter an Order requiring the Defendants to have advanced threat monitoring sensors in the Shelby County voter registration environments.
- 10. Allow the Plaintiffs' expert, or an agreed independent expert, and/or Independent Master, to inspect and review the Shelby County's voting systems, including the AccuVote

DREs, GEMS software, and tabulator(s), prior to use of the voting machines; and report any findings of unauthorized software or improprieties to the Court and appropriate law enforcement authorities.

11. Enter an Order requiring the Defendants to remove any remote access software on the Shelby County voting systems, including AccuVote DREs, GEMS software, election management systems, and/or tabulators, and prohibiting any such software to be installed and/or utilized thereafter.
12. Enter an Order requiring two-factor authentication for elections officials who access the Shelby County's voting systems to be implemented by the Defendants Immediately.
13. Enter an Order requiring the Defendants to install any security patches and upgrades to the Shelby County's voting systems, including election management systems, AccuVote DREs, GEMS software, and tabulators
14. Enter an Order requiring the Defendants Shelby County Election Commission, Shelby Board and Shelby Election Administrator to allow poll watchers for candidates, as well as the Plaintiff Shelby Advocates for Valid Elections, to watch the collection of memory cartridges at the election satellite Zone Turn-In Sites, and also the process of tabulation of votes (at the tabulators located in the annex and/or downtown SCEC offices).
15. Enter an Order requiring the Defendants to immediately notify the candidates and the public of any irregularities in the Shelby County elections, including the use of more than one database, broken seals on voting machines and equipment, uploads of votes prior to the close of polls at 7pm on election day, missing memory cartridges and cards, the upload of extra memory cards and cartridges, the addition and/or removal of any voting

machines at polls after the first day of early vote (with the polls identified and the reason for the addition(s)/removal(s) provided), problems with electronic poll books, and any breaches of the Shelby voting systems before, during and/or after the votes are cast.

16. Require the Defendants to promulgate, adopt, and enforce uniform standards and processes to conduct criminal background checks for any vendors, poll workers, staff, and volunteers, who have access to the Shelby County voting machines, election management system, GEMS software, and/or tabulators, and publish the names of any such person(s) to the public and candidates.
17. Entire an Order authorizing the Plaintiffs' expert, or an agreed independent expert, or an Independent Master, to inspect the Shelby County voting systems audit logs, election equipment, and tabulators from the date that the election management system and tabulators are inspected pre-election (as set forth above) through the date that the post-election audit is completed and before certification is sought from the local or state officials;
18. In the alternative, enter an Order that the Defendants (1) examine or reexamine the Shelby County voting machines, election management systems, tabulator(s) and GEMs software; (2) decertify the Shelby County AccuVote DREs, election management systems, tabulator(s) and software; (3) establish uniform standards and processes for testing for certification of voting machines, systems, tabulators and software that comply with the state and federal constitutions and laws; (4) report any unusual findings from the examination or reexamination of the Shelby County voting systems (including voting machines, election management systems, tabulators, and software) to the Tennessee

Attorney General, Tennessee State Comptroller, FBI, U.S. Department of Justice, DHS, Tennessee Homeland Security, and Tennessee Bureau of Investigation.

19. Enter an Order that the Defendants Shelby County Election Commission, Shelby Board, and Shelby Administrator promulgate, adopt, and enforce uniform standards and procedures on the chain of custody and vote tally of all memory cartridges and cards, including from the time the precinct opens, during voting, and after it closes to the time brought to satellite Zone Turn-in Sites, including public observation rights.
20. Enter an Order requiring that the Defendants Shelby County Election Commission, Shelby Administrator and Shelby Board promulgate, adopt, and enforce uniform standards and processes to prevent the use of voting machines and systems with wireless communication capability, and further to prevent remote transmission of votes from memory cards from satellite Zone Turn in sites, precinct polls, or otherwise to the GEMS or any other server for tabulation.
21. Enter an Order to the Defendants that all digital ballot images from past and future elections be preserved and backed up; that the audit logs be produced; and that the Shelby voting systems, including the tabulator(s), shall be preserved and not disposed of nor discarded until independent expert inspection is performed with a report to the Court.
22. That a judgment be entered for the Plaintiffs against the Defendants, jointly and severally.
23. Retain jurisdiction to ensure all Defendants' ongoing compliance with the foregoing Orders;
24. Grant Plaintiffs an award of their reasonable attorney's fees, costs, and expenses incurred in this action pursuant to 42 U.S.C. 1988; and

25. Grant Plaintiffs such other relief as the Court deems just and proper.

Respectfully submitted.

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